FIG. 1

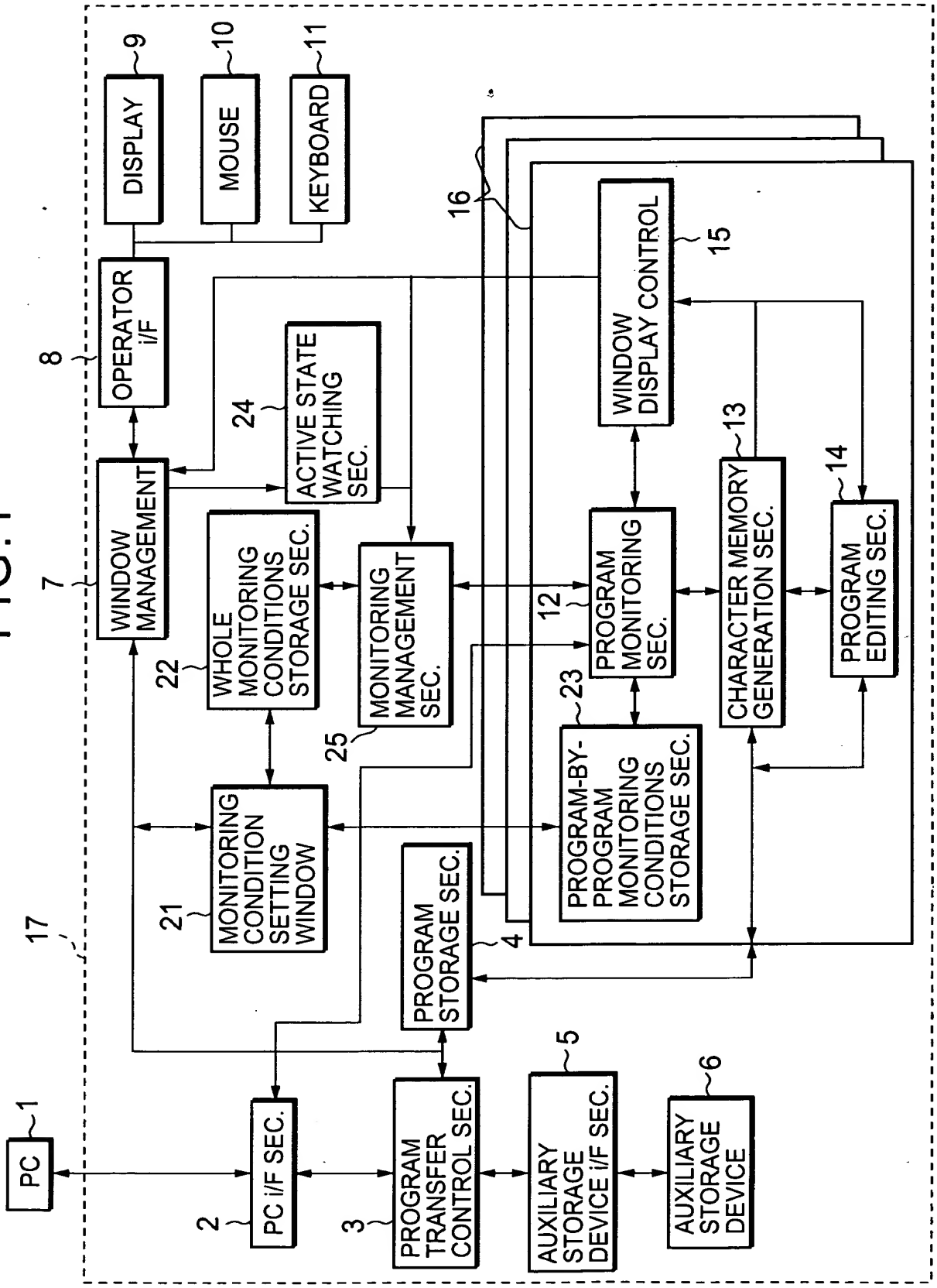

PC
1
PC i/F SEC.
2
PROGRAM TRANSFER CONTROL SEC.
3
AUXILIARY STORAGE DEVICE i/F SEC.
5
AUXILIARY STORAGE DEVICE
6
PROGRAM STORAGE SEC.
4
17
MONITORING CONDITION SETTING WINDOW
21
WHOLE MONITORING CONDITIONS STORAGE SEC.
22
MONITORING MANAGEMENT SEC.
25
PROGRAM-BY-PROGRAM MONITORING CONDITIONS STORAGE SEC.
23
PROGRAM MONITORING SEC.
12
CHARACTER MEMORY GENERATION SEC.
13
PROGRAM EDITING SEC.
14
WINDOW DISPLAY CONTROL
15
16
WINDOW MANAGEMENT
7
ACTIVE STATE WATCHING SEC.
24
OPERATOR i/F
8
DISPLAY
9
MOUSE
10
KEYBOARD
11

FIG.2

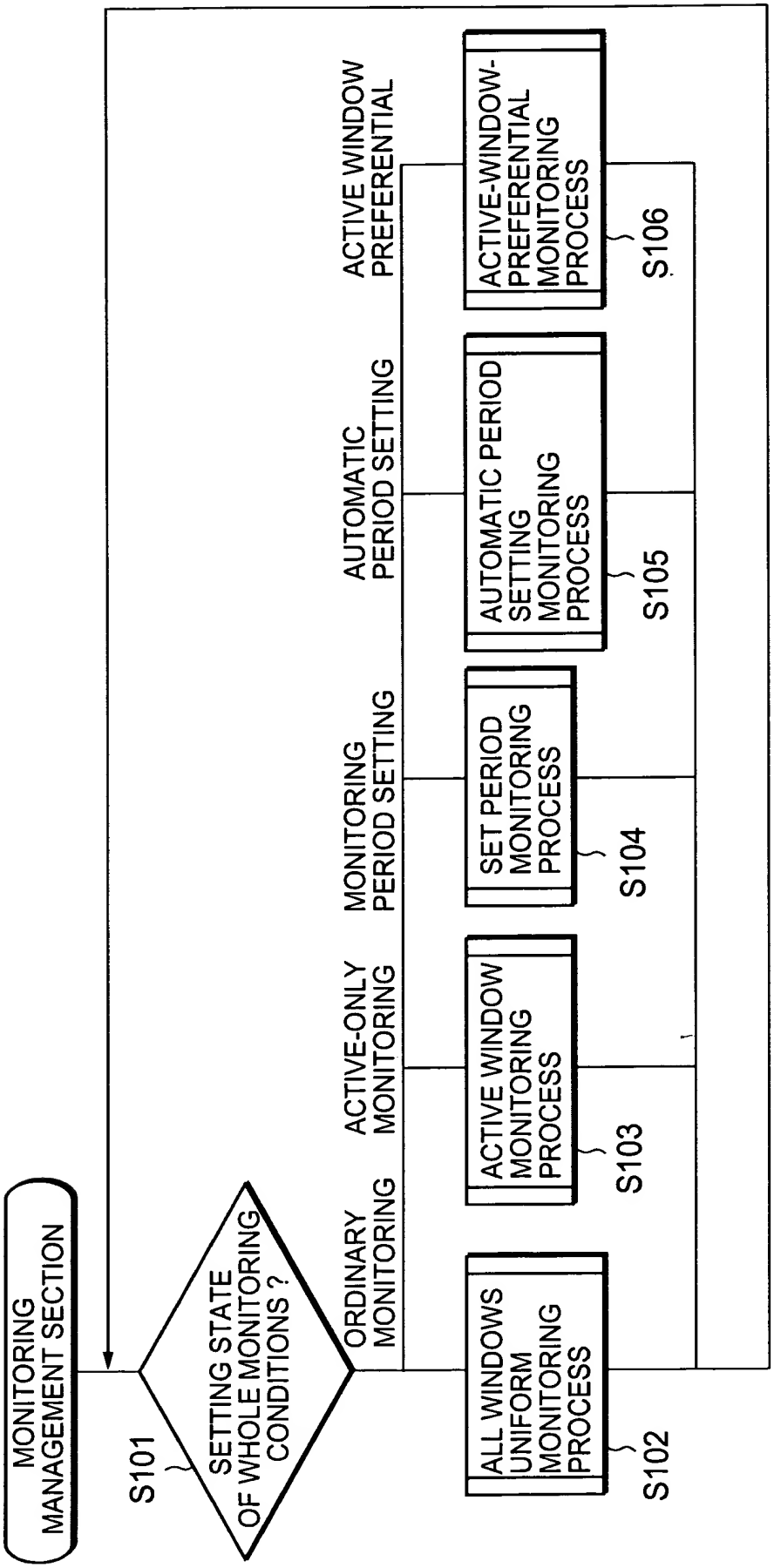

MONITORING MANAGEMENT SECTION
S101
SETTING STATE OF WHOLE MONITORING CONDITIONS ?
ORDINARY MONITORING
ALL WINDOWS UNIFORM MONITORING PROCESS
S102
ACTIVE-ONLY MONITORING
ACTIVE WINDOW MONITORING PROCESS
S103
MONITORING PERIOD SETTING
SET PERIOD MONITORING PROCESS
S104
AUTOMATIC PERIOD SETTING
AUTOMATIC PERIOD SETTING MONITORING PROCESS
S105
ACTIVE WINDOW PREFERENTIAL
ACTIVE-WINDOW-PREFERENTIAL MONITORING PROCESS
S106

FIG.3

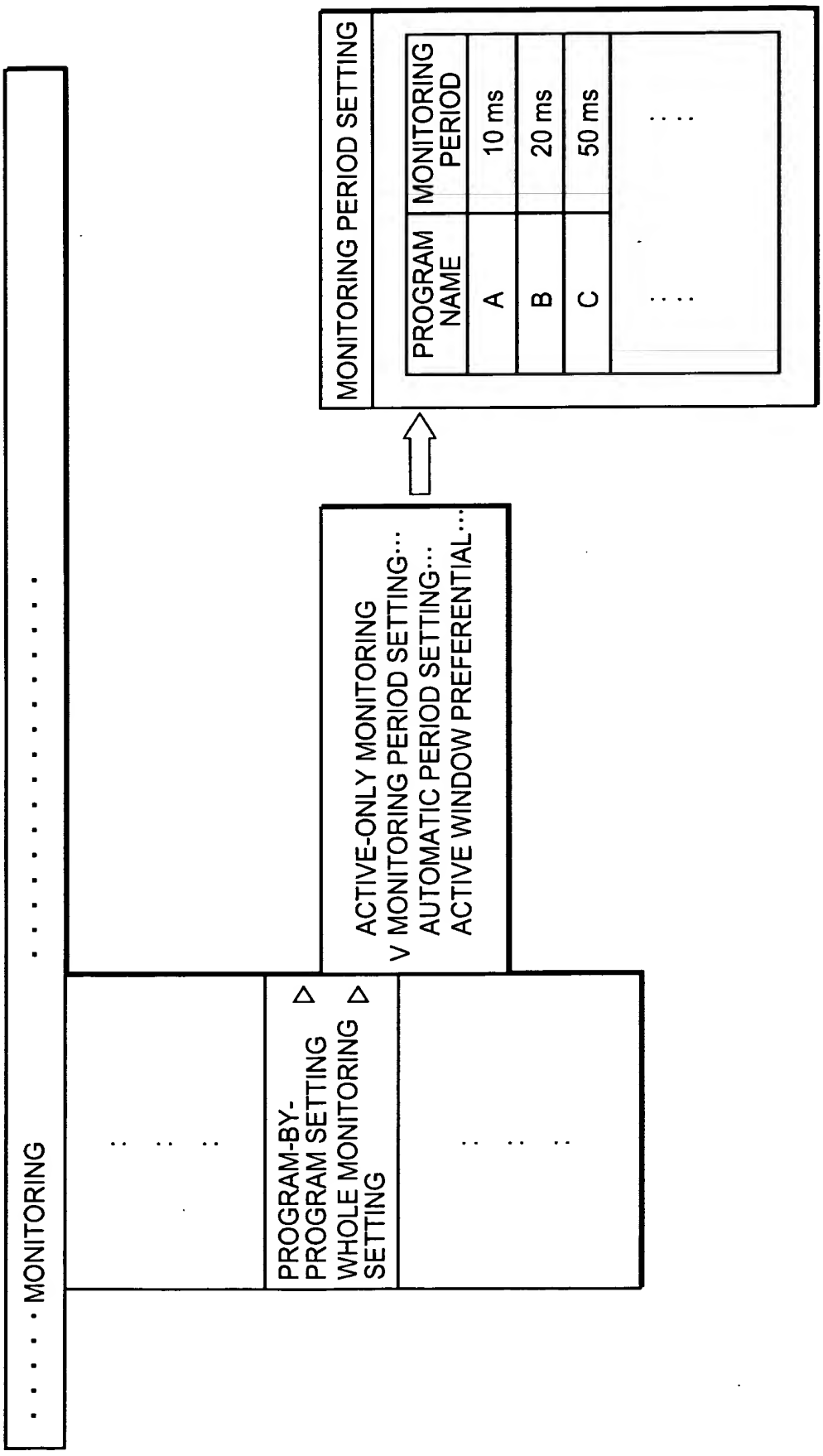

MONITORING
PROGRAM-BY-PROGRAM SETTING
WHOLE MONITORING SETTING
ACTIVE-ONLY MONITORING
MONITORING PERIOD SETTING
AUTOMATIC PERIOD SETTING
ACTIVE WINDOW PREFERENTIAL
MONITORING PERIOD SETTING
PROGRAM NAME
MONITORING PERIOD
A
10 ms
B
20 ms
C
50 ms

FIG.4

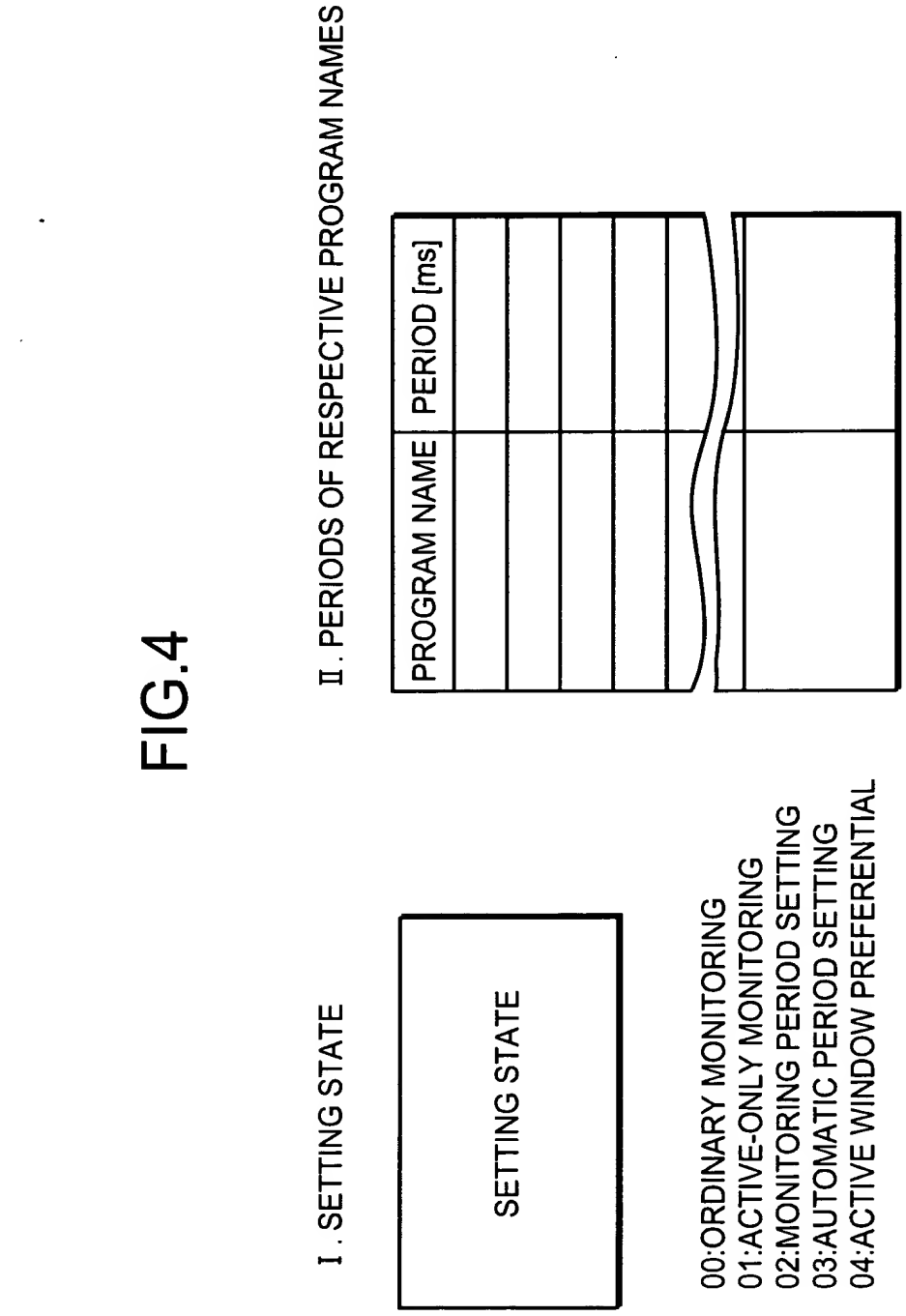

I. SETTING STATE
SETTING STATE
00:ORDINARY MONITORING
01:ACTIVE-ONLY MONITORING
02:MONITORING PERIOD SETTING
03:AUTOMATIC PERIOD SETTING
04:ACTIVE WINDOW PREFERENTIAL
II. PERIODS OF RESPECTIVE PROGRAM NAMES
PROGRAM NAME
PERIOD [ms]

FIG.5

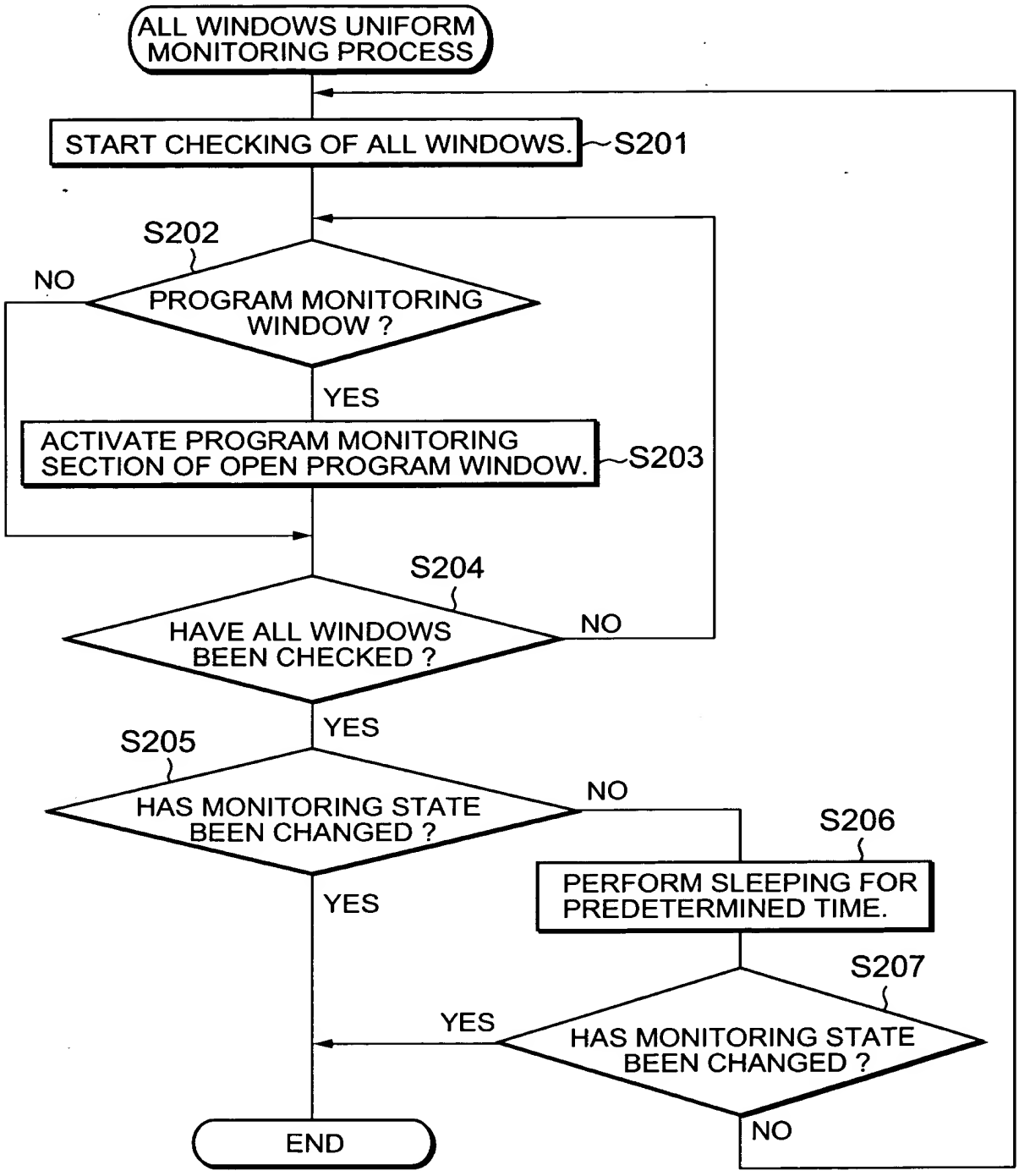
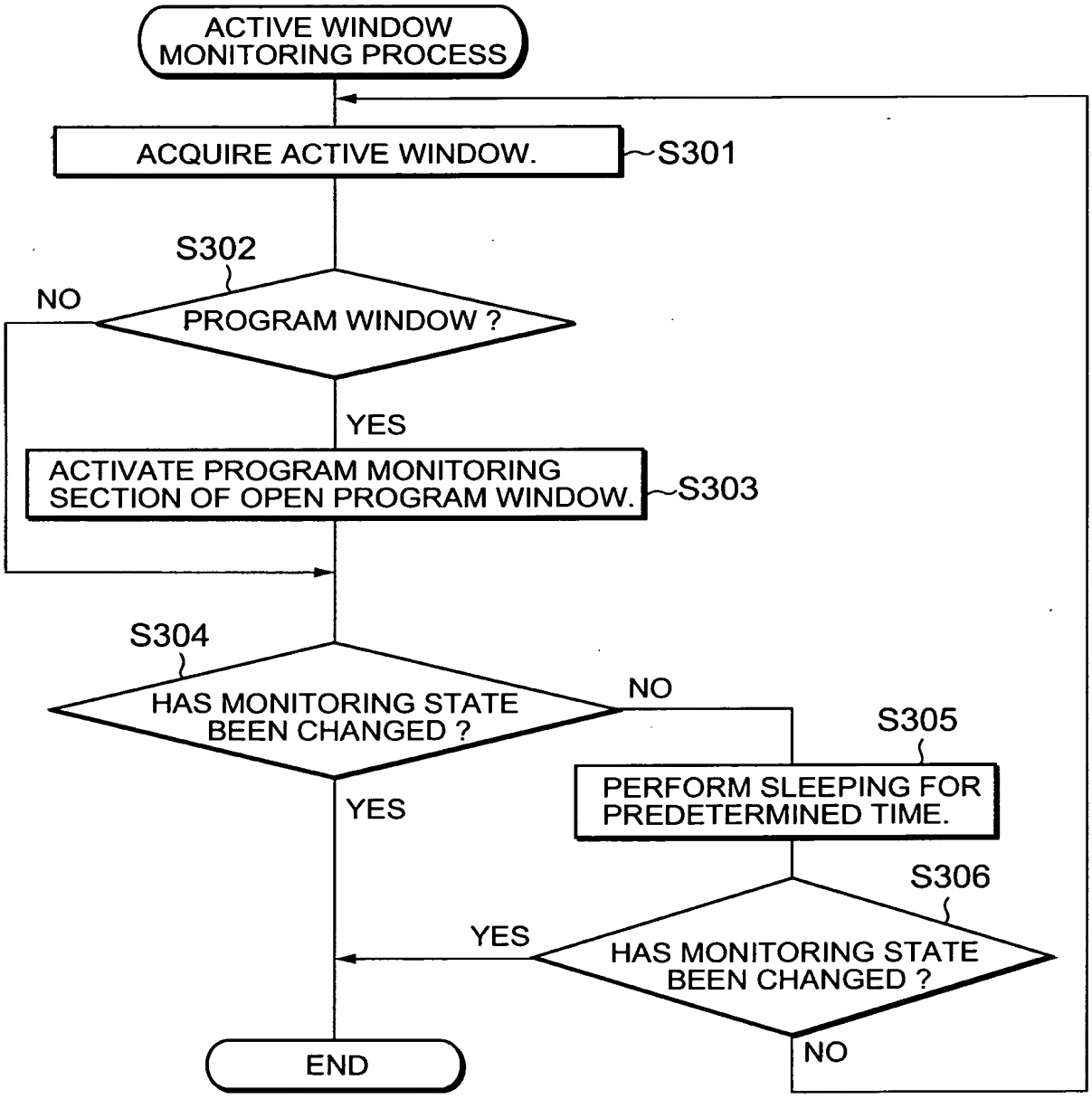

ALL WINDOWS UNIFORM MONITORING PROCESS
START CHECKING OF ALL WINDOWS.
S201
S202
PROGRAM MONITORING WINDOW ?
NO
YES
ACTIVATE PROGRAM MONITORING SECTION OF OPEN PROGRAM WINDOW.
S203
S204
HAVE ALL WINDOWS BEEN CHECKED ?
NO
YES
S205
HAS MONITORING STATE BEEN CHANGED ?
NO
YES
S206
PERFORM SLEEPING FOR PREDETERMINED TIME.
S207
HAS MONITORING STATE BEEN CHANGED ?
YES
NO
END

FIG.6


ACTIVE WINDOW MONITORING PROCESS
ACQUIRE ACTIVE WINDOW.
S301
S302
NO
PROGRAM WINDOW ?
YES
ACTIVATE PROGRAM MONITORING SECTION OF OPEN PROGRAM WINDOW.
S303
S304
HAS MONITORING STATE BEEN CHANGED ?
NO
S305
PERFORM SLEEPING FOR PREDETERMINED TIME.
YES
S306
YES
HAS MONITORING STATE BEEN CHANGED ?
NO
END

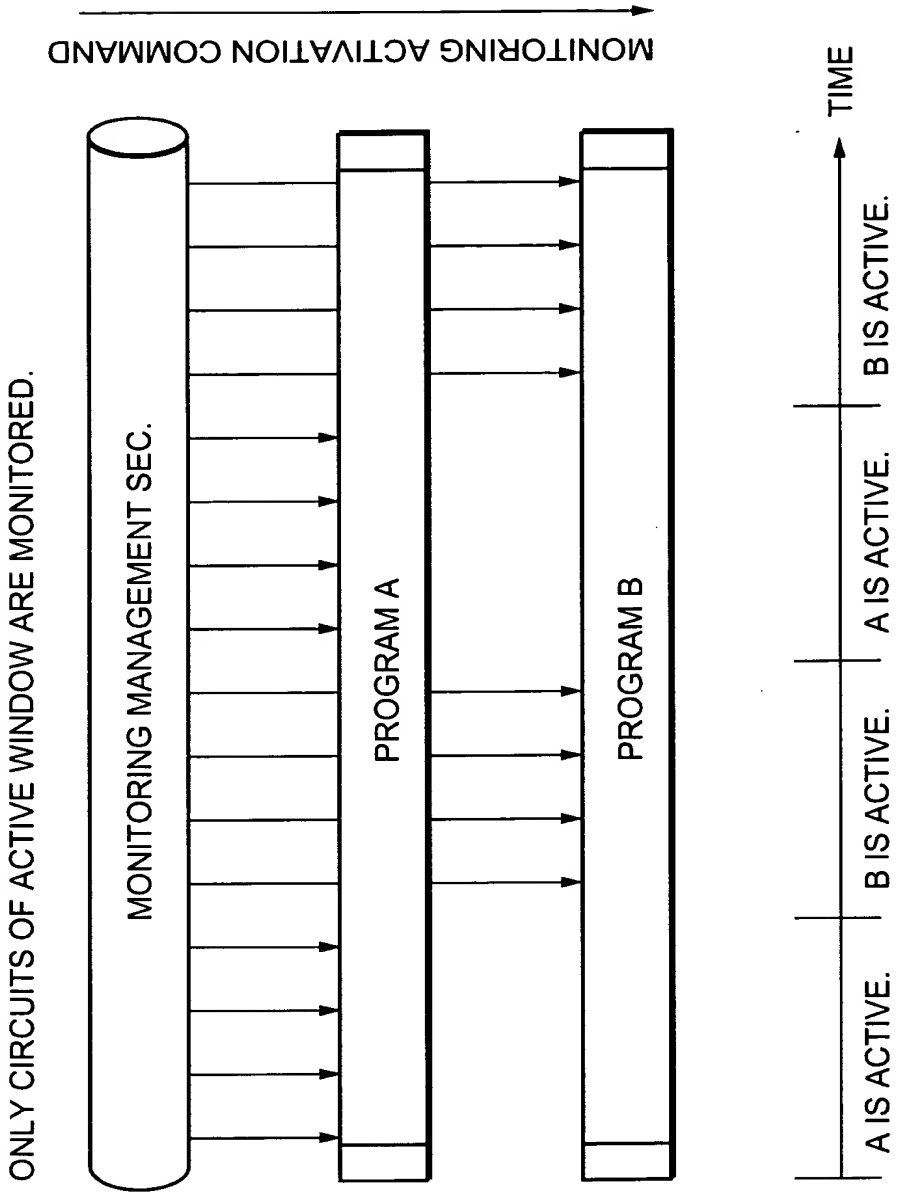

MONITORING ACTIVATION COMMAND
TIME
ONLY CIRCUITS OF ACTIVE WINDOW ARE MONITORED.
MONITORING MANAGEMENT SEC.
PROGRAM A
PROGRAM B
A IS ACTIVE.
B IS ACTIVE.
A IS ACTIVE.
B IS ACTIVE.

FIG.7

FIG.8

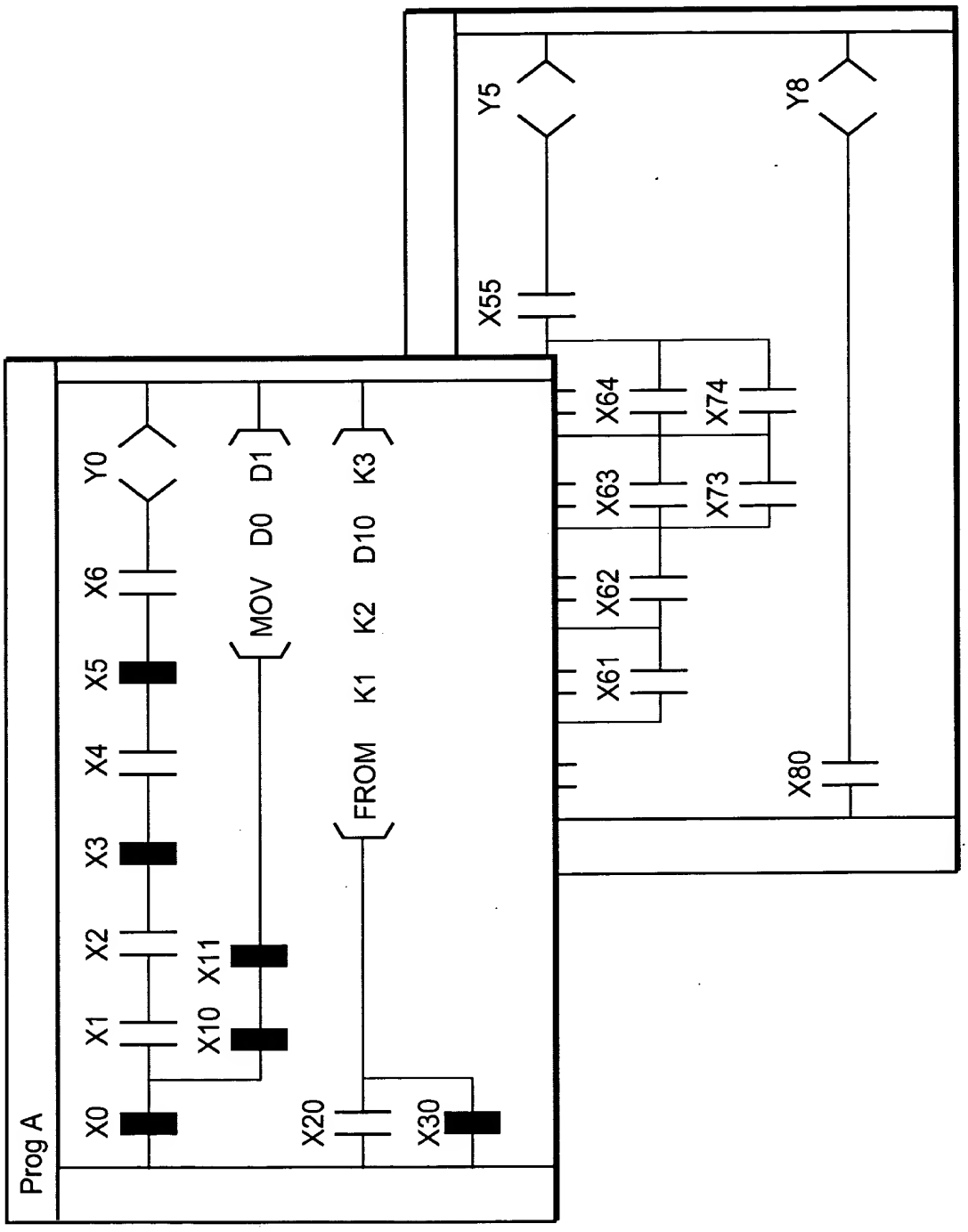

Prog A
X0
X1
X2
X3
X4
X5
X6
Y0
X10
X11
MOV
D0
D1
X20
FROM
K1
K2
K3
D10
X30
X55
Y5
X61
X62
X63
X64
X73
X74
Y8
X80

FIG.9

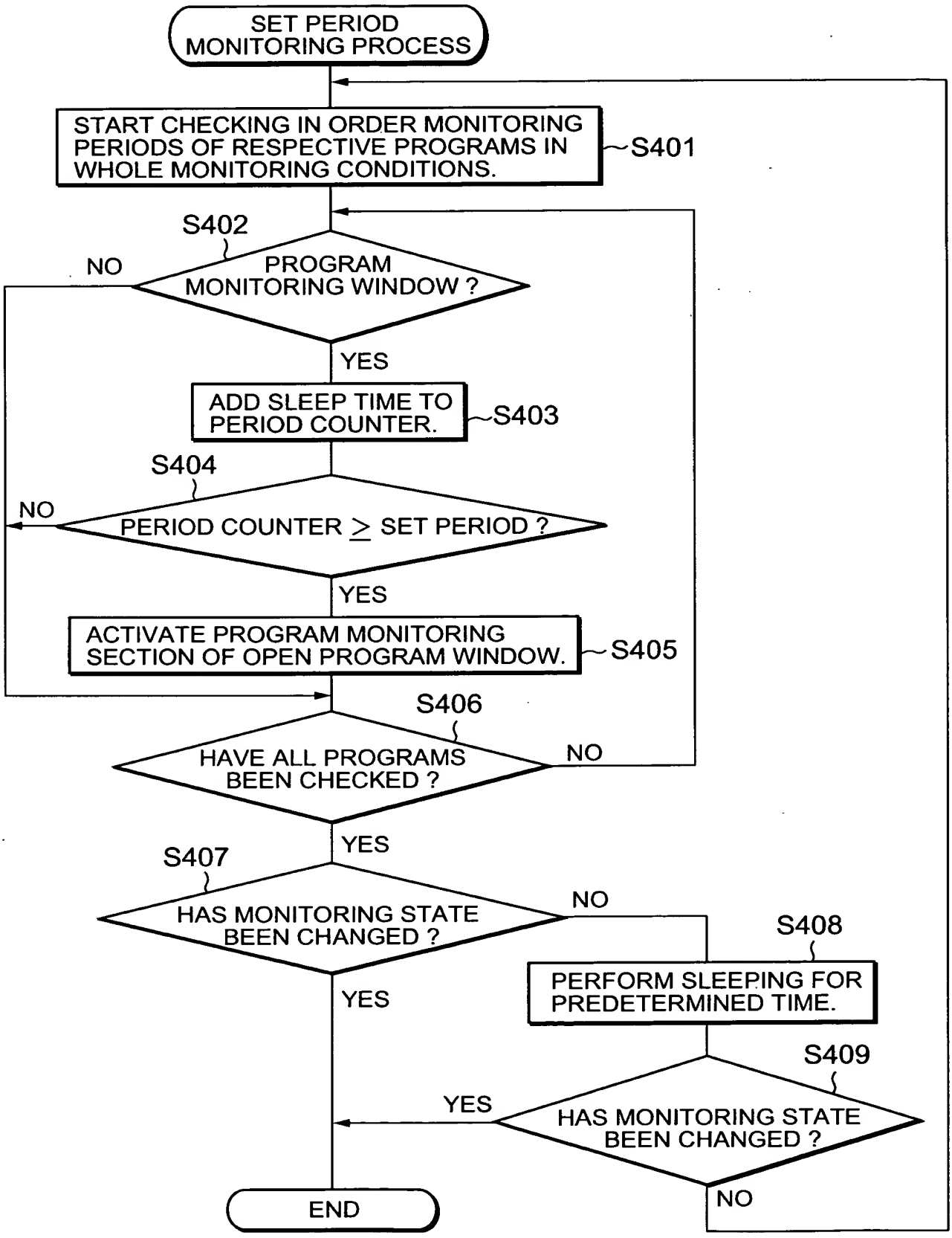

SET PERIOD MONITORING PROCESS
START CHECKING IN ORDER MONITORING PERIODS OF RESPECTIVE PROGRAMS IN WHOLE MONITORING CONDITIONS.
S401
S402
PROGRAM MONITORING WINDOW ?
NO
YES
ADD SLEEP TIME TO PERIOD COUNTER.
S403
S404
PERIOD COUNTER ≥ SET PERIOD ?
NO
YES
ACTIVATE PROGRAM MONITORING SECTION OF OPEN PROGRAM WINDOW.
S405
S406
HAVE ALL PROGRAMS BEEN CHECKED ?
NO
YES
S407
HAS MONITORING STATE BEEN CHANGED ?
NO
YES
S408
PERFORM SLEEPING FOR PREDETERMINED TIME.
S409
HAS MONITORING STATE BEEN CHANGED ?
YES
NO
END

FIG.10

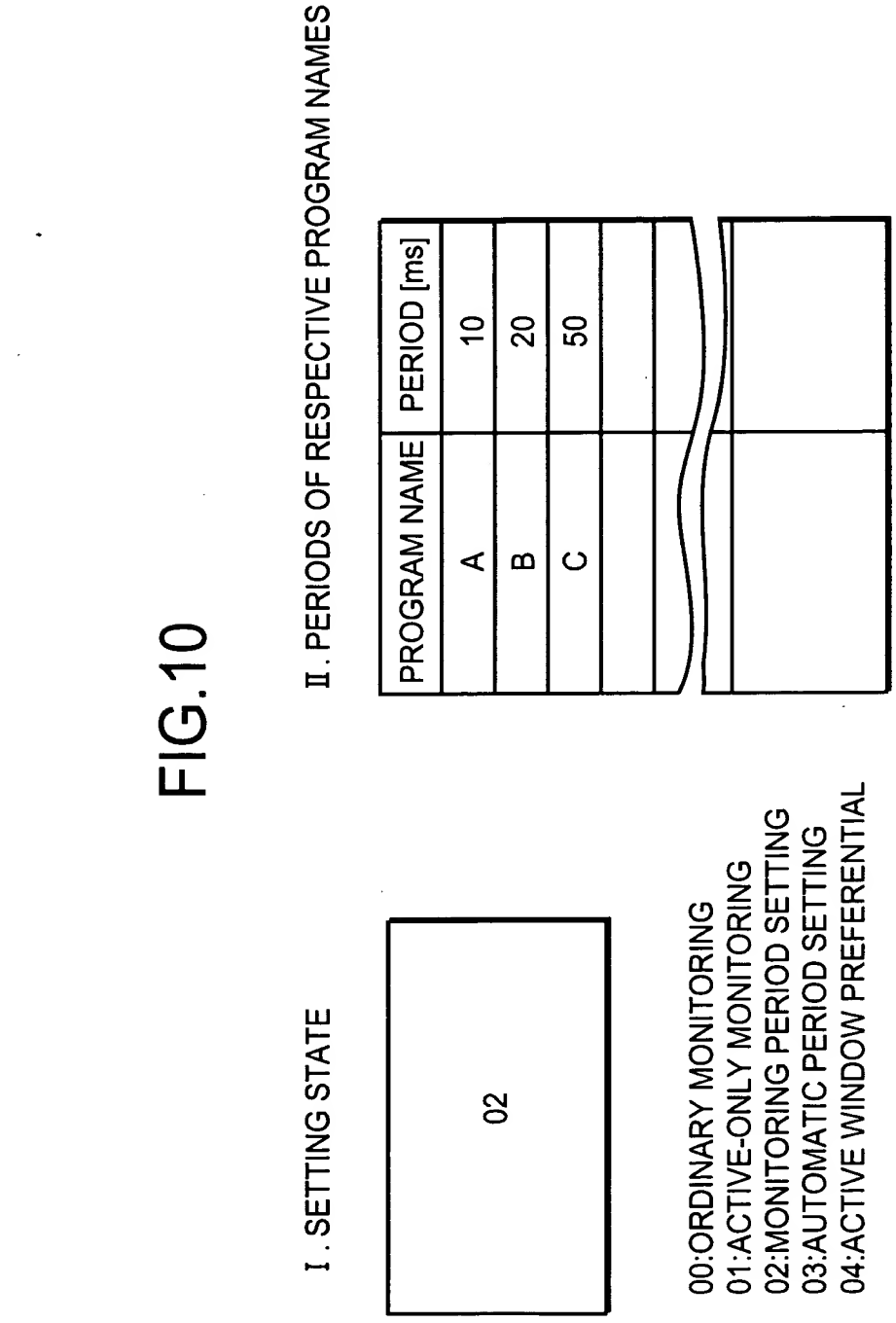

I. SETTING STATE
02
00:ORDINARY MONITORING
01:ACTIVE-ONLY MONITORING
02:MONITORING PERIOD SETTING
03:AUTOMATIC PERIOD SETTING
04:ACTIVE WINDOW PREFERENTIAL
II. PERIODS OF RESPECTIVE PROGRAM NAMES
PROGRAM NAME
PERIOD [ms]
A
10
B
20
C
50

FIG.11

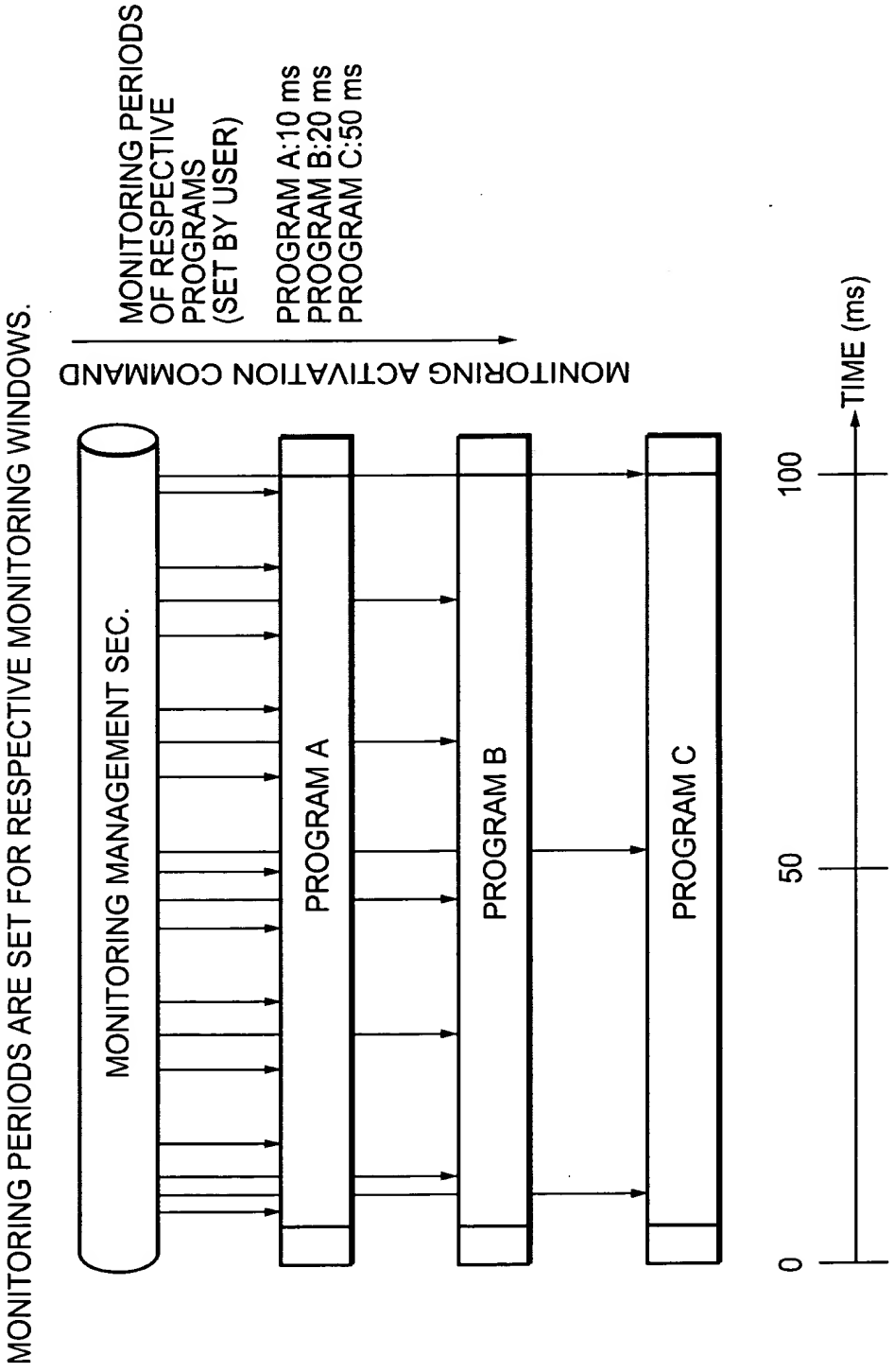

MONITORING PERIODS ARE SET FOR RESPECTIVE MONITORING WINDOWS.
MONITORING MANAGEMENT SEC.
PROGRAM A
PROGRAM B
PROGRAM C
MONITORING ACTIVATION COMMAND
MONITORING PERIODS OF RESPECTIVE PROGRAMS (SET BY USER)
PROGRAM A:10 ms
PROGRAM B:20 ms
PROGRAM C:50 ms
TIME (ms)
0
50
100

FIG.12

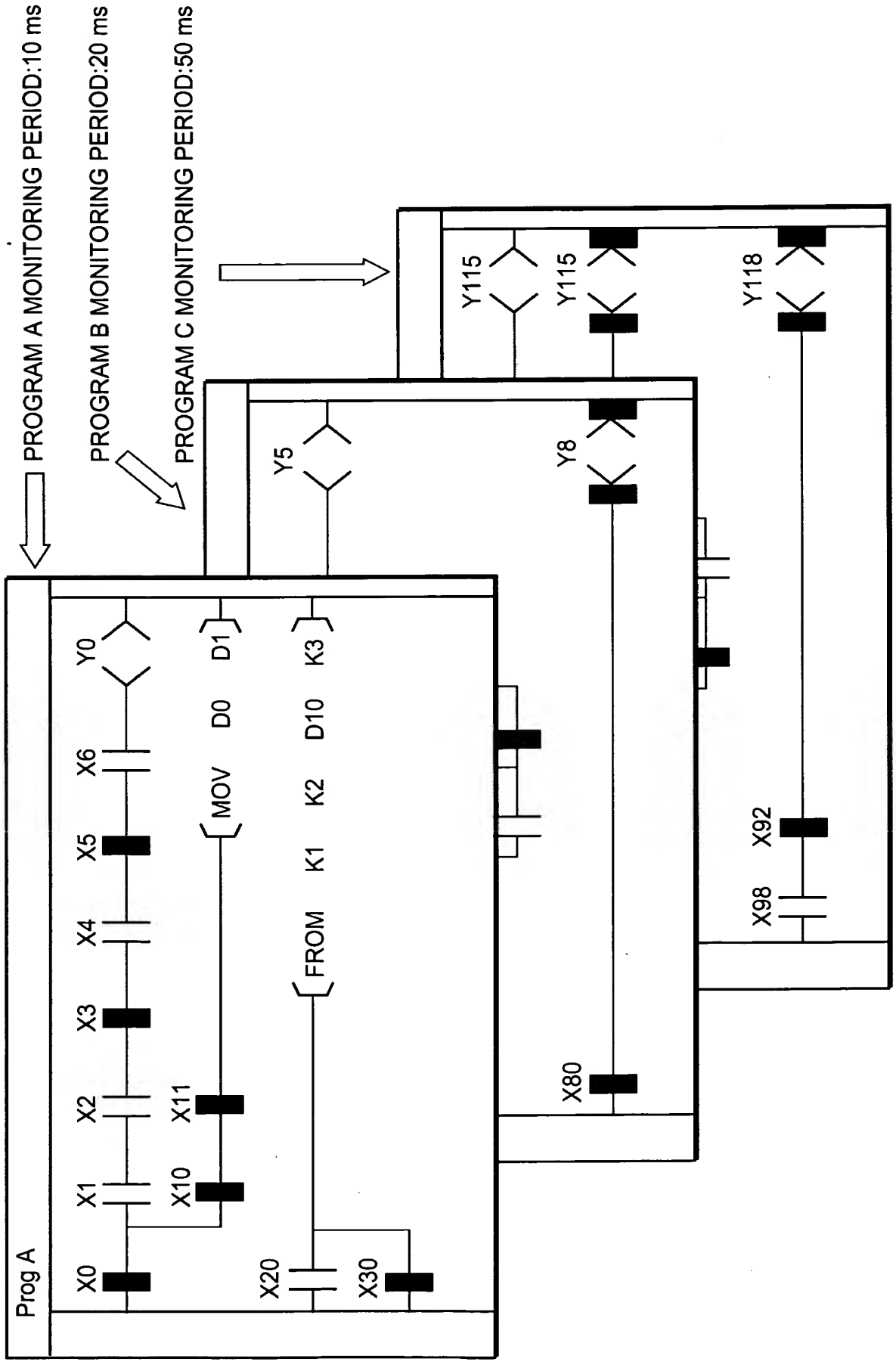

PROGRAM A MONITORING PERIOD:10 ms
PROGRAM B MONITORING PERIOD:20 ms
PROGRAM C MONITORING PERIOD:50 ms
Prog A
X0
X1
X2
X3
X4
X5
X6
Y0
X10
X11
D1
D0
MOV
X20
X30
K3
D10
K2
K1
FROM
Y5
Y115
Y115
Y8
X80
Y118
X92
X98

FIG.13

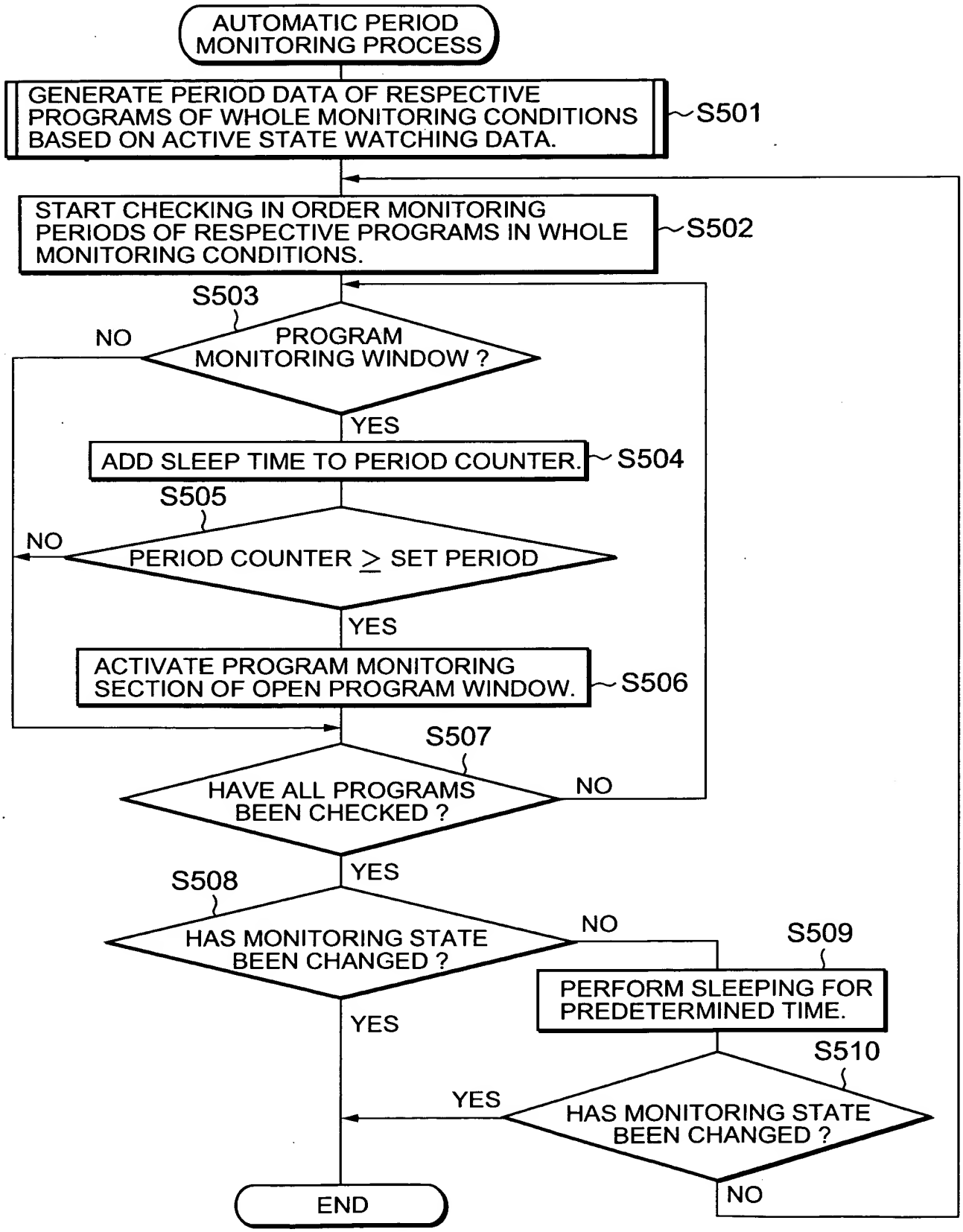

AUTOMATIC PERIOD MONITORING PROCESS
GENERATE PERIOD DATA OF RESPECTIVE PROGRAMS OF WHOLE MONITORING CONDITIONS BASED ON ACTIVE STATE WATCHING DATA.
S501
START CHECKING IN ORDER MONITORING PERIODS OF RESPECTIVE PROGRAMS IN WHOLE MONITORING CONDITIONS.
S502
S503
PROGRAM MONITORING WINDOW ?
NO
YES
ADD SLEEP TIME TO PERIOD COUNTER.
S504
S505
PERIOD COUNTER ≥ SET PERIOD
NO
YES
ACTIVATE PROGRAM MONITORING SECTION OF OPEN PROGRAM WINDOW.
S506
S507
HAVE ALL PROGRAMS BEEN CHECKED ?
NO
YES
S508
HAS MONITORING STATE BEEN CHANGED ?
NO
S509
PERFORM SLEEPING FOR PREDETERMINED TIME.
S510
HAS MONITORING STATE BEEN CHANGED ?
YES
NO
YES
END

FIG.14

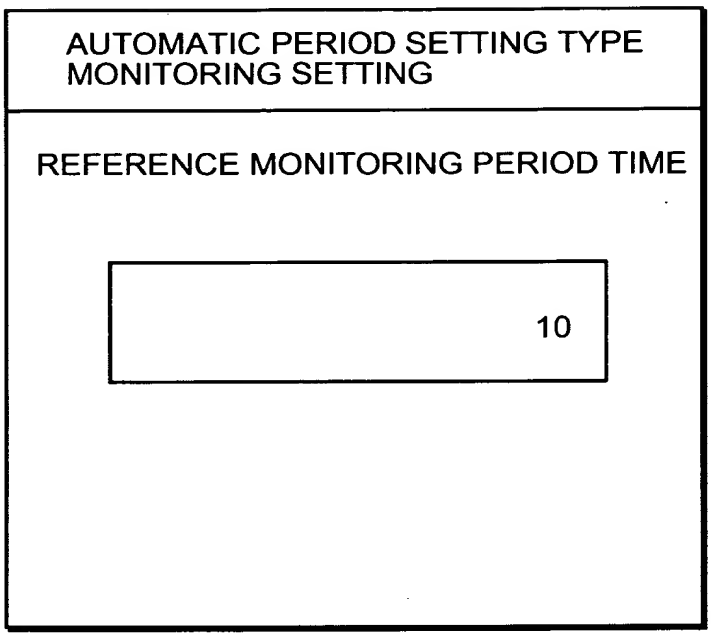

AUTOMATIC PERIOD SETTING TYPE MONITORING SETTING
REFERENCE MONITORING PERIOD TIME
10

FIG.15

EXAMPLE OF DATA OF TOTAL MONITORING CONDITIONS IN AUTOMATIC PERIOD SETTING TYPE MONITORING

Ⅰ. SETTING STATE

03

00:ORDINARY MONITORING
01:ACTIVE-ONLY MONITORING
02:MONITORING PERIOD SETTING
03:AUTOMATIC PERIOD SETTING
04:ACTIVE WINDOW PREFERENTIAL

Ⅱ. PERIODS OF RESPECTIVE PROGRAM NAMES

PROGRAM NAME	PERIOD [ms]
A	10
B	20
C	50

Ⅲ. REFERENCE MONITORING PERIOD TIME

10 ms

FIG.16

STATE OF ACTIVE STATE WATCHING DATA

PROGRAM NAME	ACTIVE TIME	PRESENCE CONFIRMATION FLAG
A	60	1
B	20	1
C	20	1

FIG.17

MONITORING PERIOD OF WINDOW HAVING LONGER ACTIVE TIME IS SHORTENED.

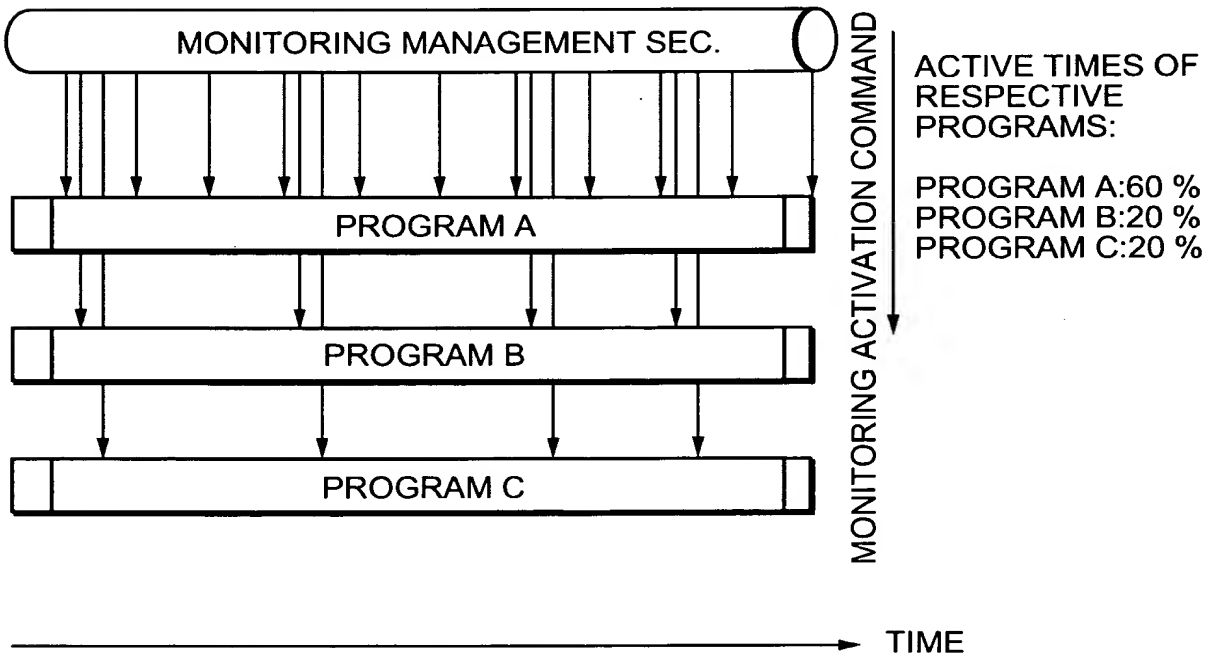


FIG.18

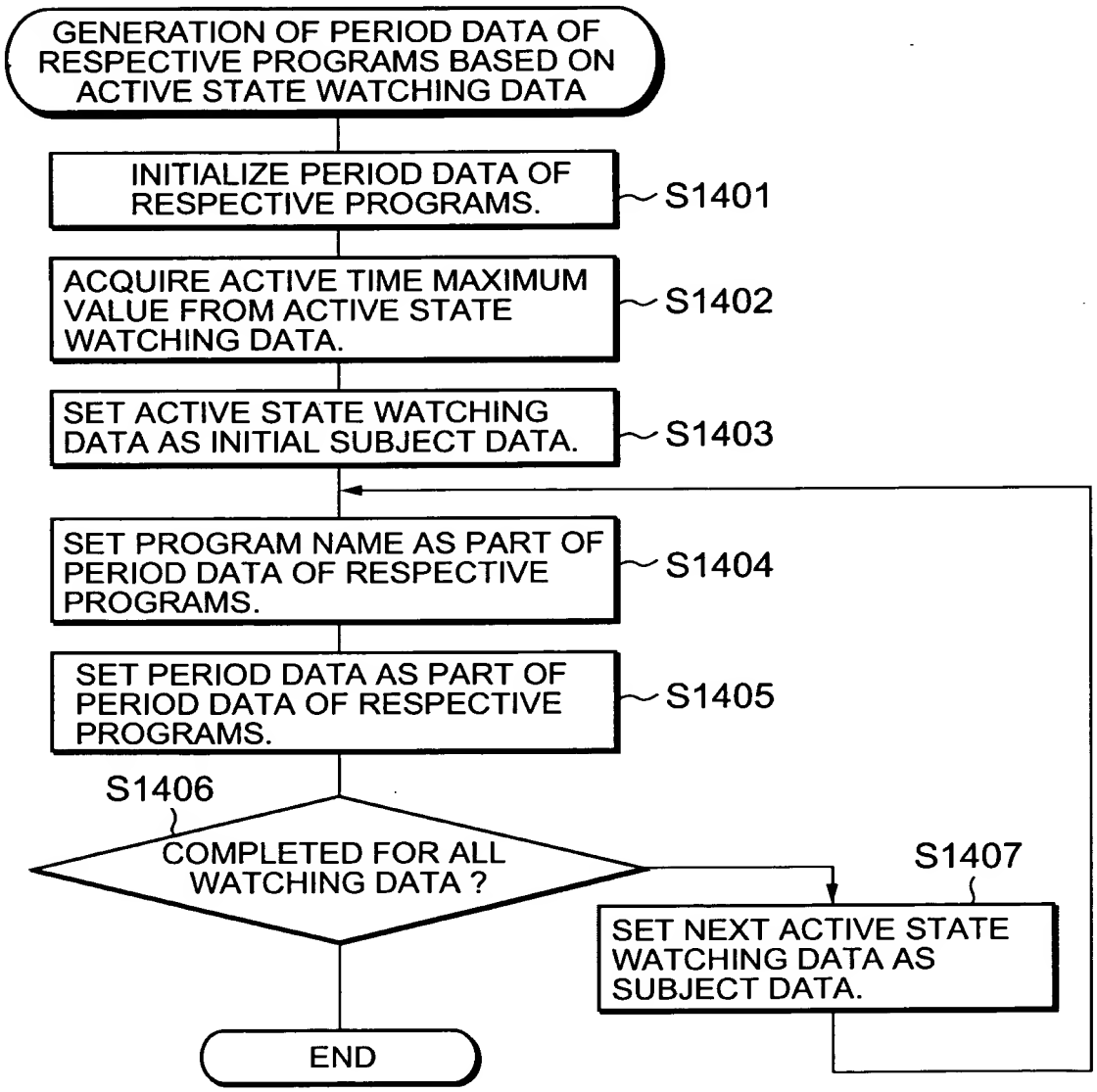

GENERATION OF PERIOD DATA OF RESPECTIVE PROGRAMS BASED ON ACTIVE STATE WATCHING DATA
INITIALIZE PERIOD DATA OF RESPECTIVE PROGRAMS.
S1401
ACQUIRE ACTIVE TIME MAXIMUM VALUE FROM ACTIVE STATE WATCHING DATA.
S1402
SET ACTIVE STATE WATCHING DATA AS INITIAL SUBJECT DATA.
S1403
SET PROGRAM NAME AS PART OF PERIOD DATA OF RESPECTIVE PROGRAMS.
S1404
SET PERIOD DATA AS PART OF PERIOD DATA OF RESPECTIVE PROGRAMS.
S1405
S1406
COMPLETED FOR ALL WATCHING DATA ?
S1407
SET NEXT ACTIVE STATE WATCHING DATA AS SUBJECT DATA.
END

FIG.19

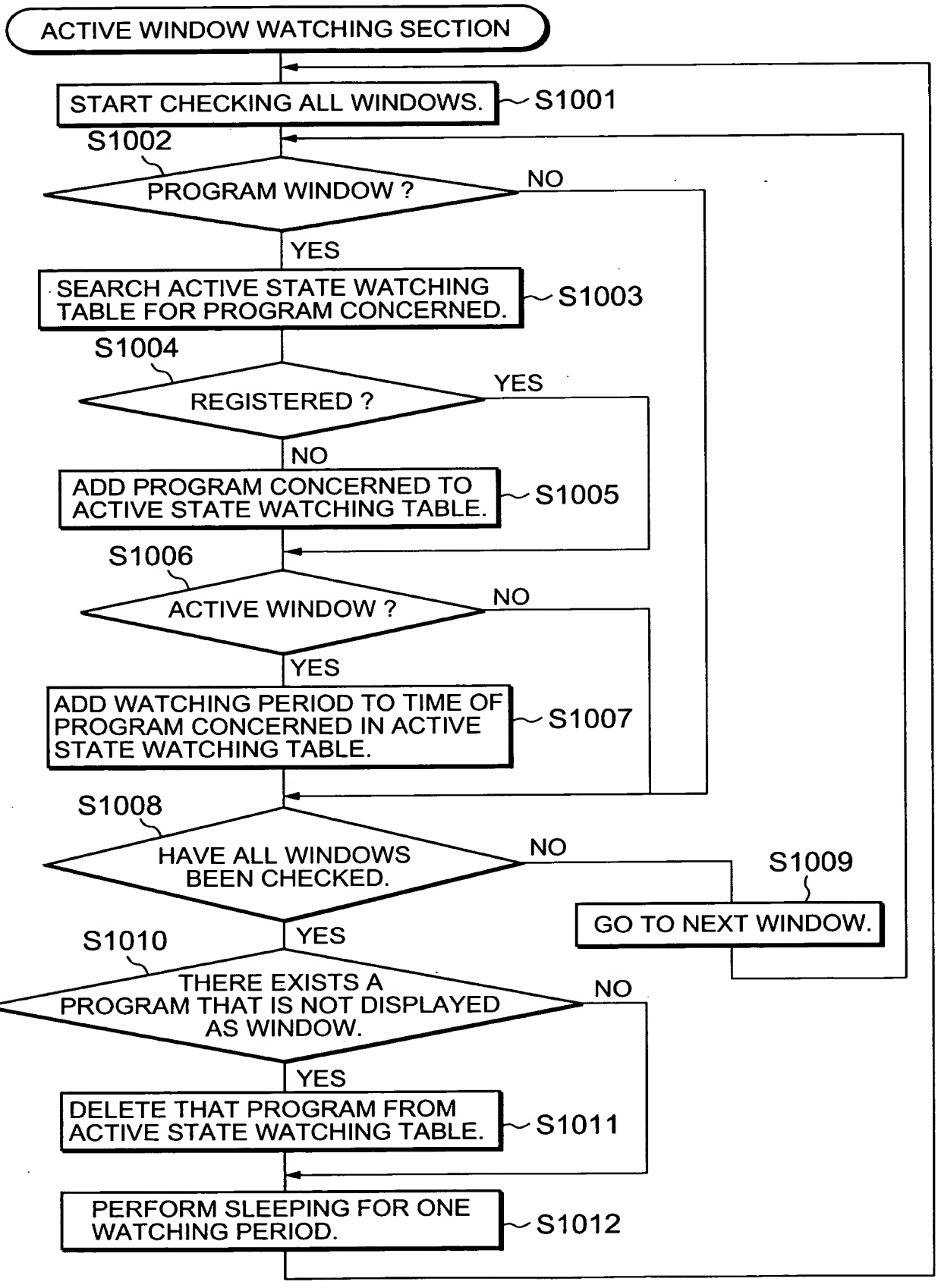

ACTIVE WINDOW WATCHING SECTION
START CHECKING ALL WINDOWS.
S1001
S1002
PROGRAM WINDOW ?
NO
YES
SEARCH ACTIVE STATE WATCHING TABLE FOR PROGRAM CONCERNED.
S1003
S1004
REGISTERED ?
YES
NO
ADD PROGRAM CONCERNED TO ACTIVE STATE WATCHING TABLE.
S1005
S1006
ACTIVE WINDOW ?
NO
YES
ADD WATCHING PERIOD TO TIME OF PROGRAM CONCERNED IN ACTIVE STATE WATCHING TABLE.
S1007
S1008
HAVE ALL WINDOWS BEEN CHECKED.
NO
S1009
GO TO NEXT WINDOW.
YES
S1010
THERE EXISTS A PROGRAM THAT IS NOT DISPLAYED AS WINDOW.
NO
YES
DELETE THAT PROGRAM FROM ACTIVE STATE WATCHING TABLE.
S1011
PERFORM SLEEPING FOR ONE WATCHING PERIOD.
S1012

FIG.20

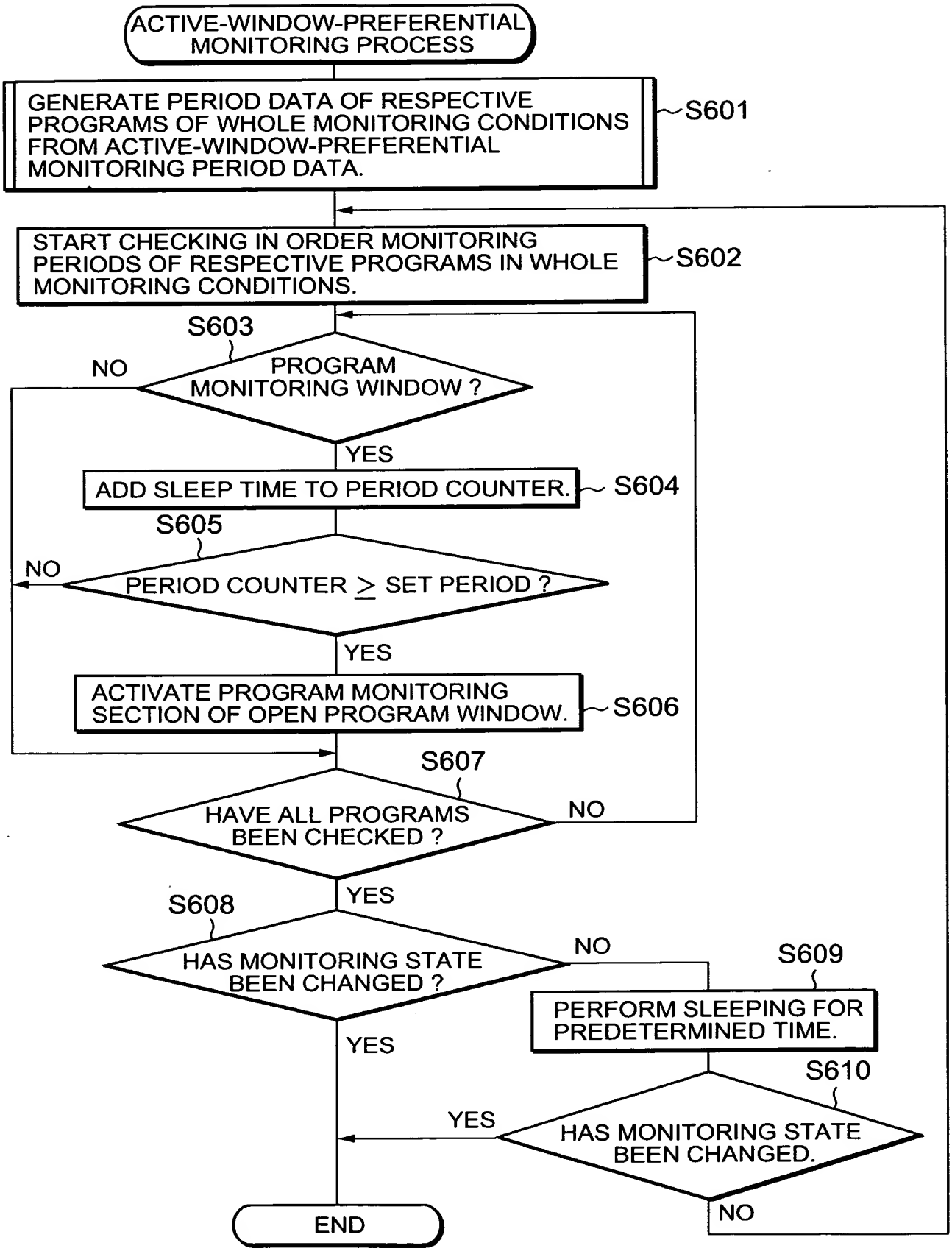

ACTIVE-WINDOW-PREFERENTIAL MONITORING PROCESS
GENERATE PERIOD DATA OF RESPECTIVE PROGRAMS OF WHOLE MONITORING CONDITIONS FROM ACTIVE-WINDOW-PREFERENTIAL MONITORING PERIOD DATA.
S601
START CHECKING IN ORDER MONITORING PERIODS OF RESPECTIVE PROGRAMS IN WHOLE MONITORING CONDITIONS.
S602
S603
PROGRAM MONITORING WINDOW ?
NO
YES
ADD SLEEP TIME TO PERIOD COUNTER.
S604
S605
PERIOD COUNTER ≥ SET PERIOD ?
NO
YES
ACTIVATE PROGRAM MONITORING SECTION OF OPEN PROGRAM WINDOW.
S606
S607
HAVE ALL PROGRAMS BEEN CHECKED ?
NO
YES
S608
HAS MONITORING STATE BEEN CHANGED ?
NO
YES
S609
PERFORM SLEEPING FOR PREDETERMINED TIME.
S610
HAS MONITORING STATE BEEN CHANGED.
YES
NO
END

FIG.21

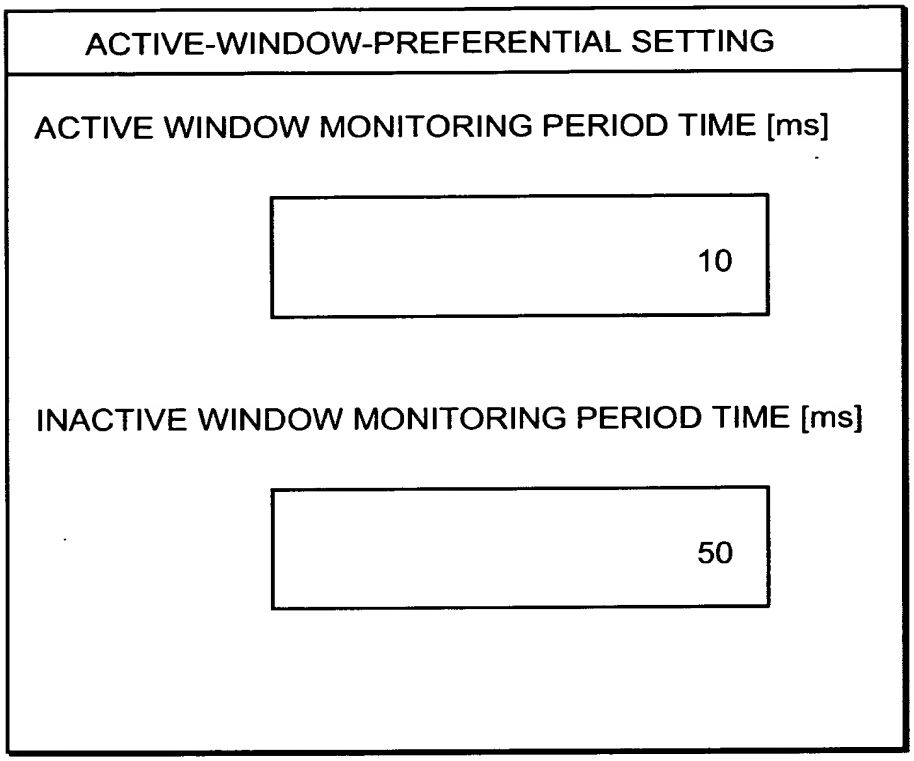

ACTIVE-WINDOW-PREFERENTIAL SETTING
ACTIVE WINDOW MONITORING PERIOD TIME [ms]
10
INACTIVE WINDOW MONITORING PERIOD TIME [ms]
50

FIG.22

EXAMPLE OF DATA OF TOTAL MONITORING CONDITIONS IN ACTIVE-WINDOW-PREFERENTIAL MONITORING

Ⅰ. SETTING STATE

04

00:ORDINARY MONITORING
01:ACTIVE-ONLY MONITORING
02:MONITORING PERIOD SETTING
03:AUTOMATIC PERIOD SETTING
04:ACTIVE WINDOW PREFERENTIAL

Ⅱ. PERIODS OF RESPECTIVE PROGRAM NAMES

PROGRAM NAME	PERIOD [ms]
A	10
B	50
C	50

Ⅲ. ACTIVE-WINDOW-PREFERENTIAL MONITORING PERIODS

ACTIVE MONITORING TIME	IN ACTIVE MONITORING TIME
10	50

FIG.23

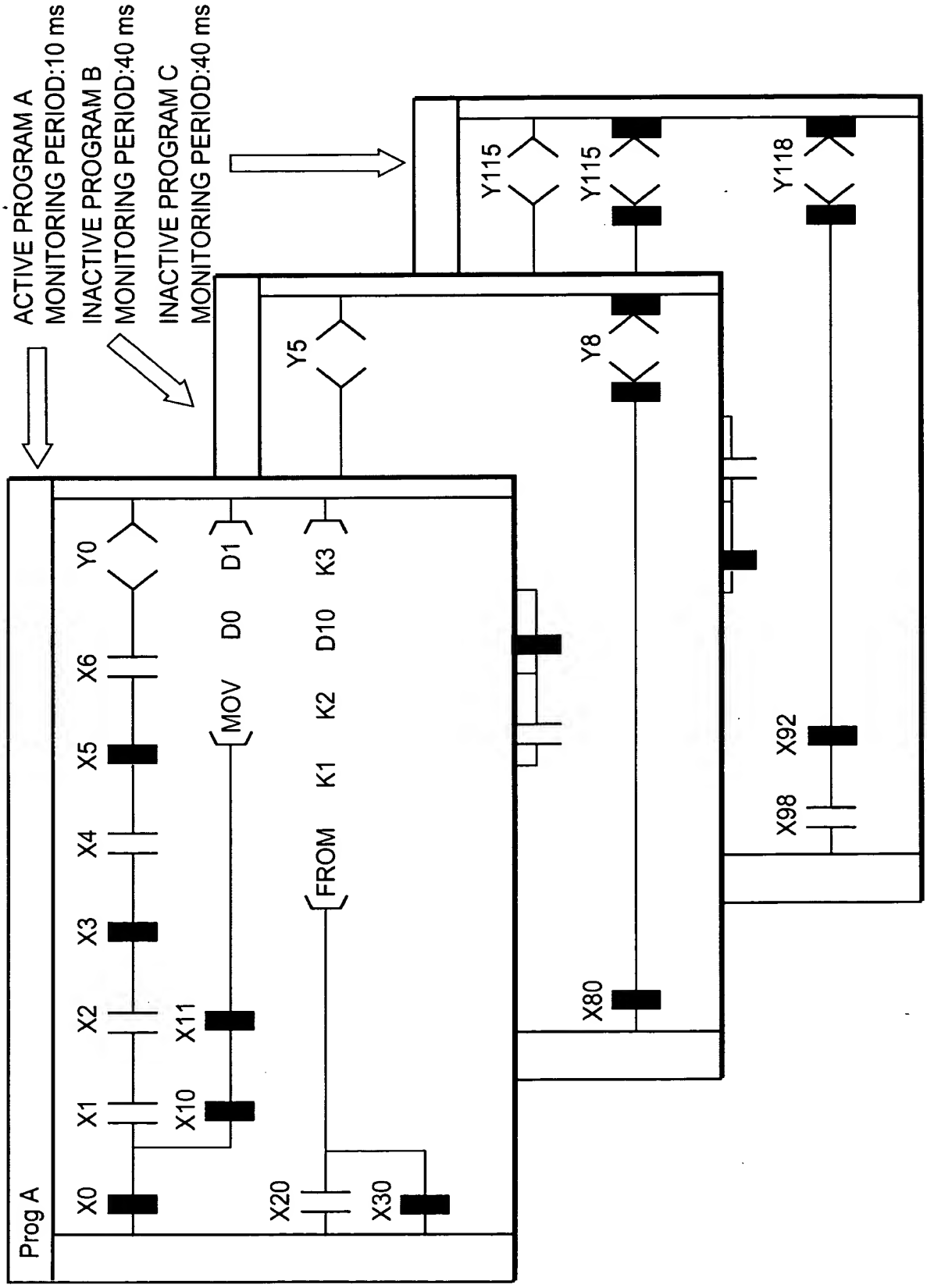

ACTIVE PROGRAM A
MONITORING PERIOD:10 ms
INACTIVE PROGRAM B
MONITORING PERIOD:40 ms
INACTIVE PROGRAM C
MONITORING PERIOD:40 ms
Prog A
X0
X1
X2
X3
X4
X5
X6
Y0
X10
X11
MOV
D0
D1
X20
FROM
K1
K2
K3
D10
X30
Y5
Y8
X80
Y115
Y115
Y118
X92
X98

FIG.24

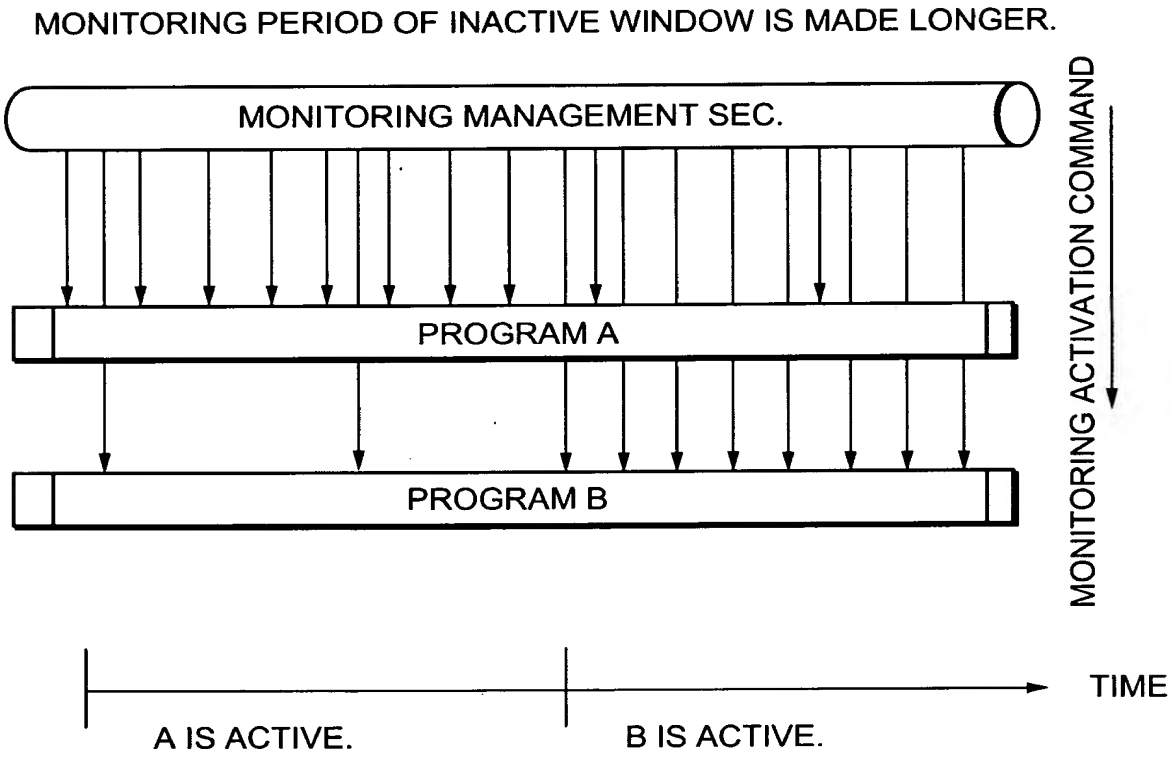

MONITORING PERIOD OF INACTIVE WINDOW IS MADE LONGER.
MONITORING MANAGEMENT SEC.
PROGRAM A
PROGRAM B
MONITORING ACTIVATION COMMAND
TIME
A IS ACTIVE.
B IS ACTIVE.

FIG.25

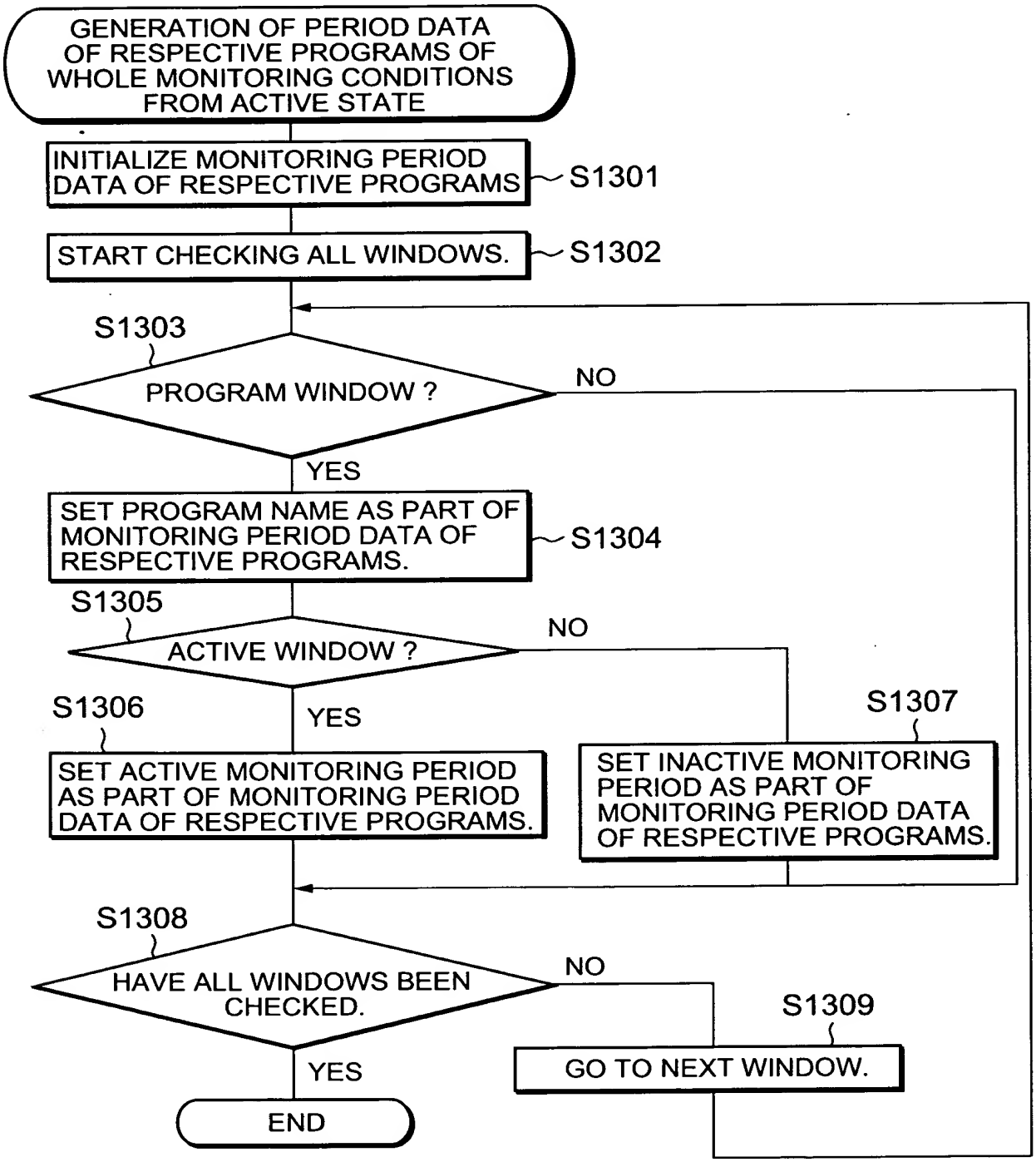

GENERATION OF PERIOD DATA OF RESPECTIVE PROGRAMS OF WHOLE MONITORING CONDITIONS FROM ACTIVE STATE
INITIALIZE MONITORING PERIOD DATA OF RESPECTIVE PROGRAMS
S1301
START CHECKING ALL WINDOWS.
S1302
S1303
PROGRAM WINDOW ?
NO
YES
SET PROGRAM NAME AS PART OF MONITORING PERIOD DATA OF RESPECTIVE PROGRAMS.
S1304
S1305
ACTIVE WINDOW ?
NO
YES
S1306
SET ACTIVE MONITORING PERIOD AS PART OF MONITORING PERIOD DATA OF RESPECTIVE PROGRAMS.
S1307
SET INACTIVE MONITORING PERIOD AS PART OF MONITORING PERIOD DATA OF RESPECTIVE PROGRAMS.
S1308
HAVE ALL WINDOWS BEEN CHECKED.
NO
YES
S1309
GO TO NEXT WINDOW.
END

FIG.26

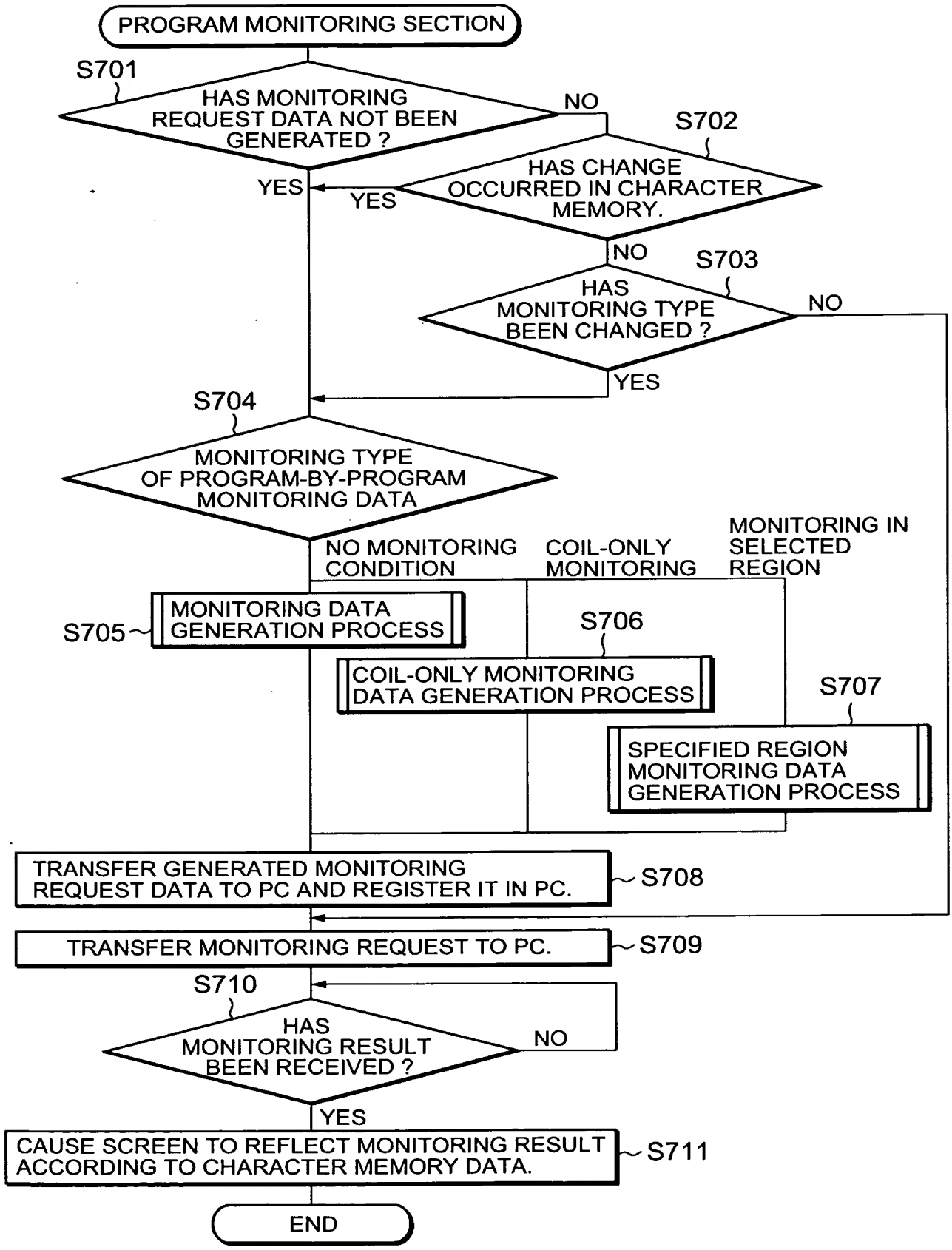

PROGRAM MONITORING SECTION
S701
HAS MONITORING REQUEST DATA NOT BEEN GENERATED ?
NO
S702
HAS CHANGE OCCURRED IN CHARACTER MEMORY.
YES
YES
NO
S703
HAS MONITORING TYPE BEEN CHANGED ?
NO
YES
S704
MONITORING TYPE OF PROGRAM-BY-PROGRAM MONITORING DATA
NO MONITORING CONDITION
COIL-ONLY MONITORING
MONITORING IN SELECTED REGION
S705
MONITORING DATA GENERATION PROCESS
S706
COIL-ONLY MONITORING DATA GENERATION PROCESS
S707
SPECIFIED REGION MONITORING DATA GENERATION PROCESS
TRANSFER GENERATED MONITORING REQUEST DATA TO PC AND REGISTER IT IN PC.
S708
TRANSFER MONITORING REQUEST TO PC.
S709
S710
HAS MONITORING RESULT BEEN RECEIVED ?
NO
YES
CAUSE SCREEN TO REFLECT MONITORING RESULT ACCORDING TO CHARACTER MEMORY DATA.
S711
END

FIG.27

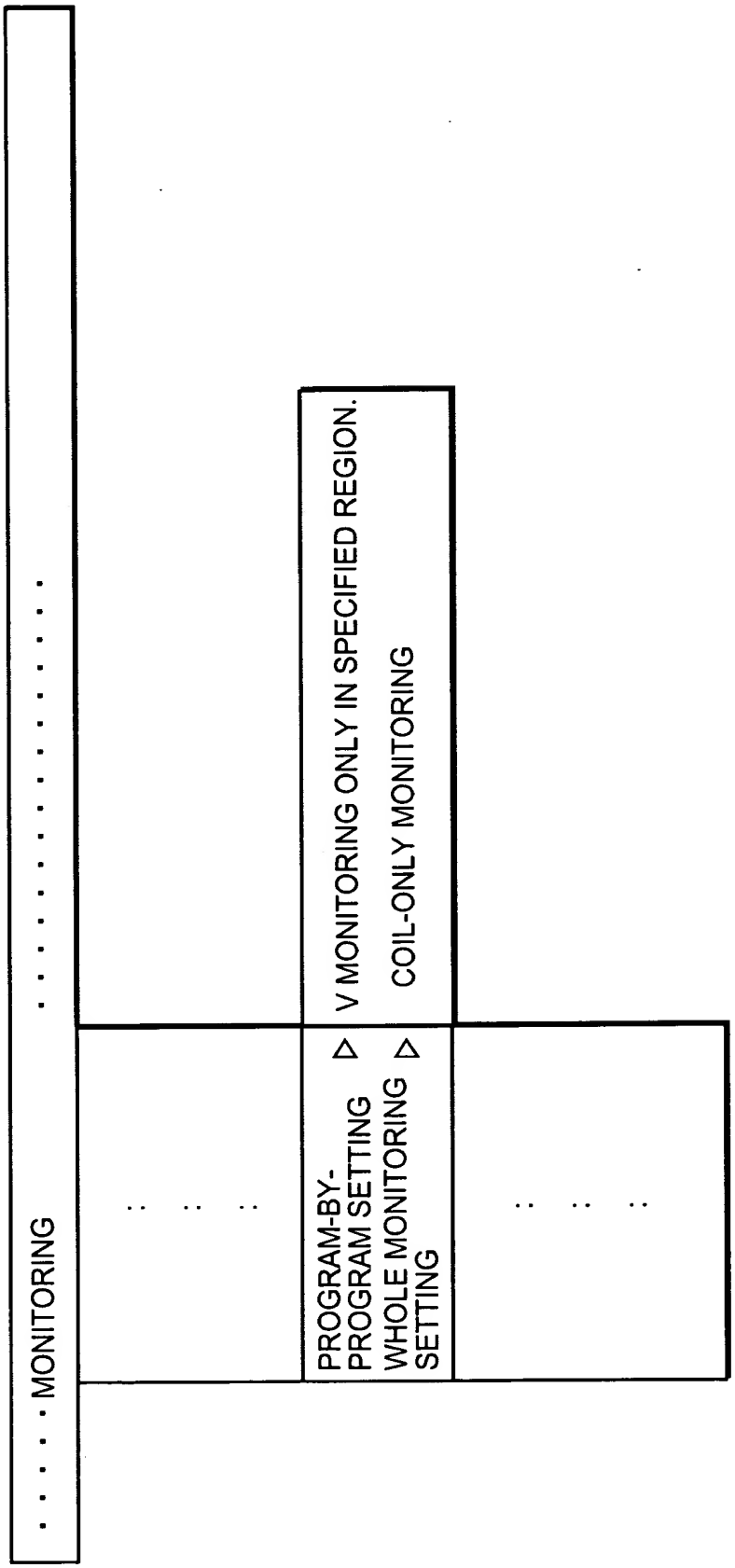

MONITORING
V MONITORING ONLY IN SPECIFIED REGION.
COIL-ONLY MONITORING
PROGRAM-BY-PROGRAM SETTING
WHOLE MONITORING SETTING

FIG.28

PROGRAM-BY-PROGRAM MONITORING DATA DIAGRAM

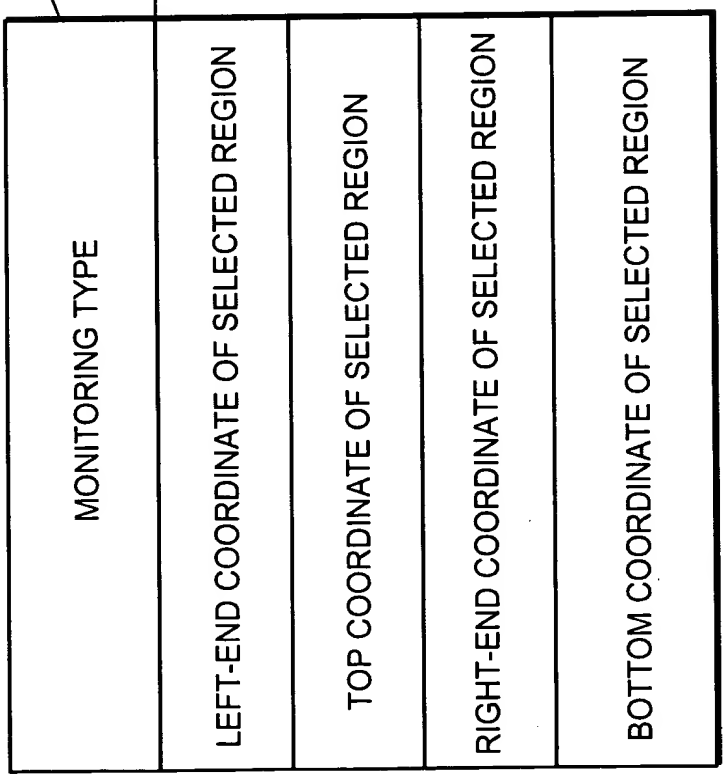


FIG.29

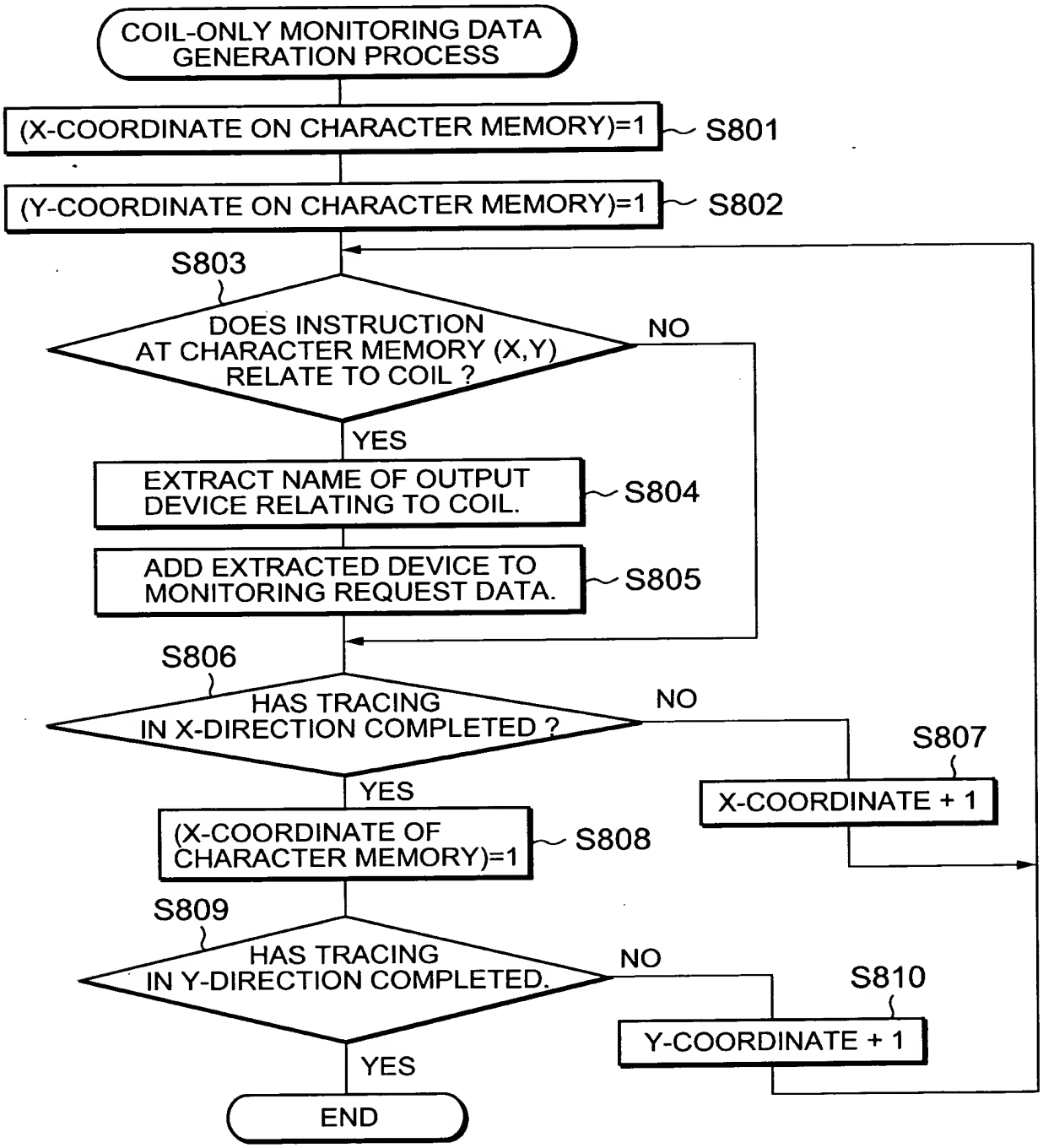

COIL-ONLY MONITORING DATA GENERATION PROCESS
(X-COORDINATE ON CHARACTER MEMORY)=1
S801
(Y-COORDINATE ON CHARACTER MEMORY)=1
S802
S803
DOES INSTRUCTION AT CHARACTER MEMORY (X,Y) RELATE TO COIL ?
NO
YES
EXTRACT NAME OF OUTPUT DEVICE RELATING TO COIL.
S804
ADD EXTRACTED DEVICE TO MONITORING REQUEST DATA.
S805
S806
HAS TRACING IN X-DIRECTION COMPLETED ?
NO
S807
X-COORDINATE + 1
YES
(X-COORDINATE OF CHARACTER MEMORY)=1
S808
S809
HAS TRACING IN Y-DIRECTION COMPLETED.
NO
S810
Y-COORDINATE + 1
YES
END

FIG.30

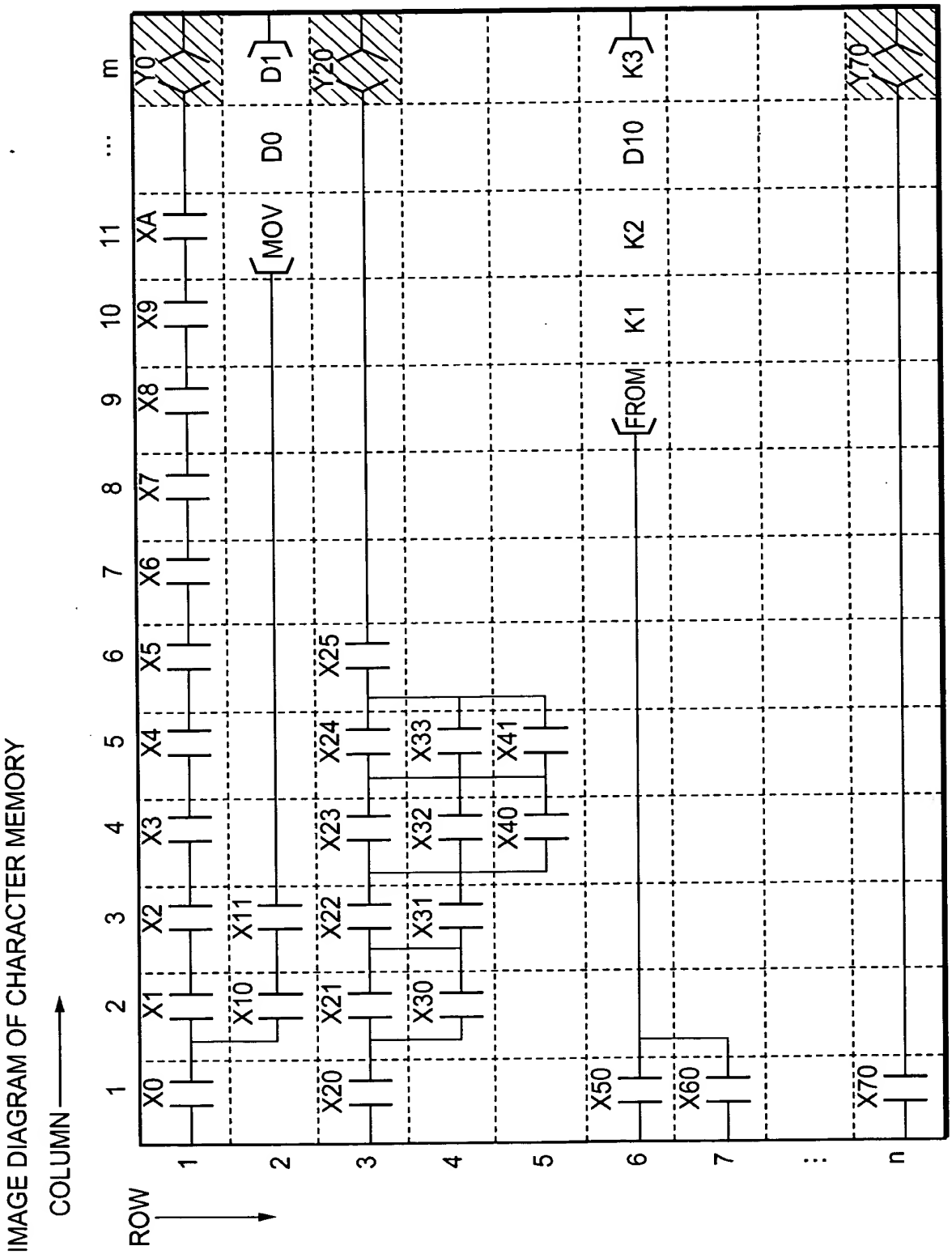


IMAGE DIAGRAM OF CHARACTER MEMORY
COLUMN
ROW
1
2
3
4
5
6
7
...
n
1
2
3
4
5
6
7
8
9
10
11
...
m
X0
X1
X2
X3
X4
X5
X6
X7
X8
X9
XA
X10
X11
X20
X21
X22
X23
X24
X25
X30
X31
X32
X33
X40
X41
X50
X60
X70
Y0
Y20
Y70
D0
D1
D10
MOV
FROM
K1
K2
K3

FIG.31

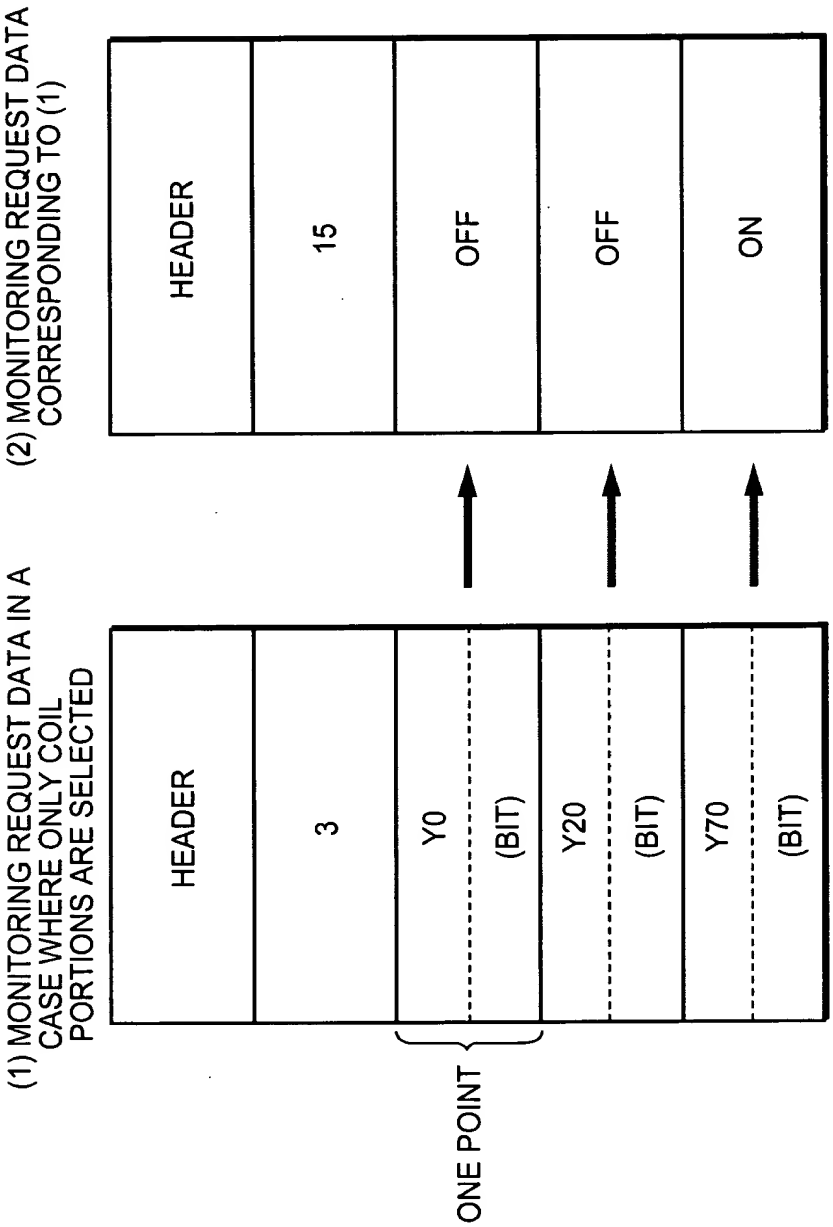

(1) MONITORING REQUEST DATA IN A CASE WHERE ONLY COIL PORTIONS ARE SELECTED
HEADER
3
Y0
(BIT)
Y20
(BIT)
Y70
(BIT)
ONE POINT
(2) MONITORING REQUEST DATA CORRESPONDING TO (1)
HEADER
15
OFF
OFF
ON

FIG.32

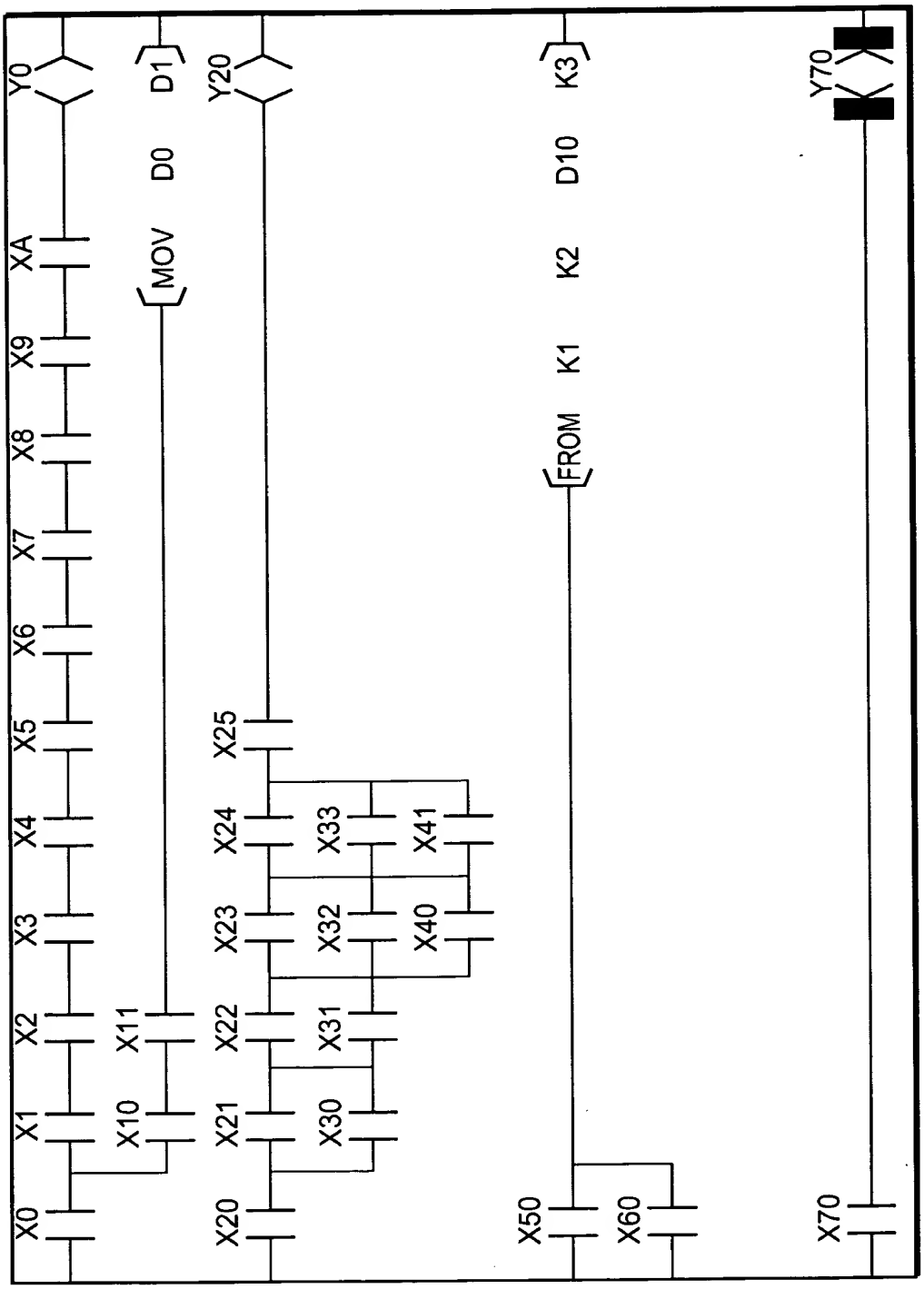

Y0
D1
Y20
K3
Y70
D0
D10
XA
MOV
K2
X9
K1
X8
FROM
X7
X6
X5
X25
X4
X24
X33
X41
X3
X23
X32
X40
X2
X11
X22
X31
X1
X10
X21
X30
X0
X20
X50
X60
X70

FIG.33

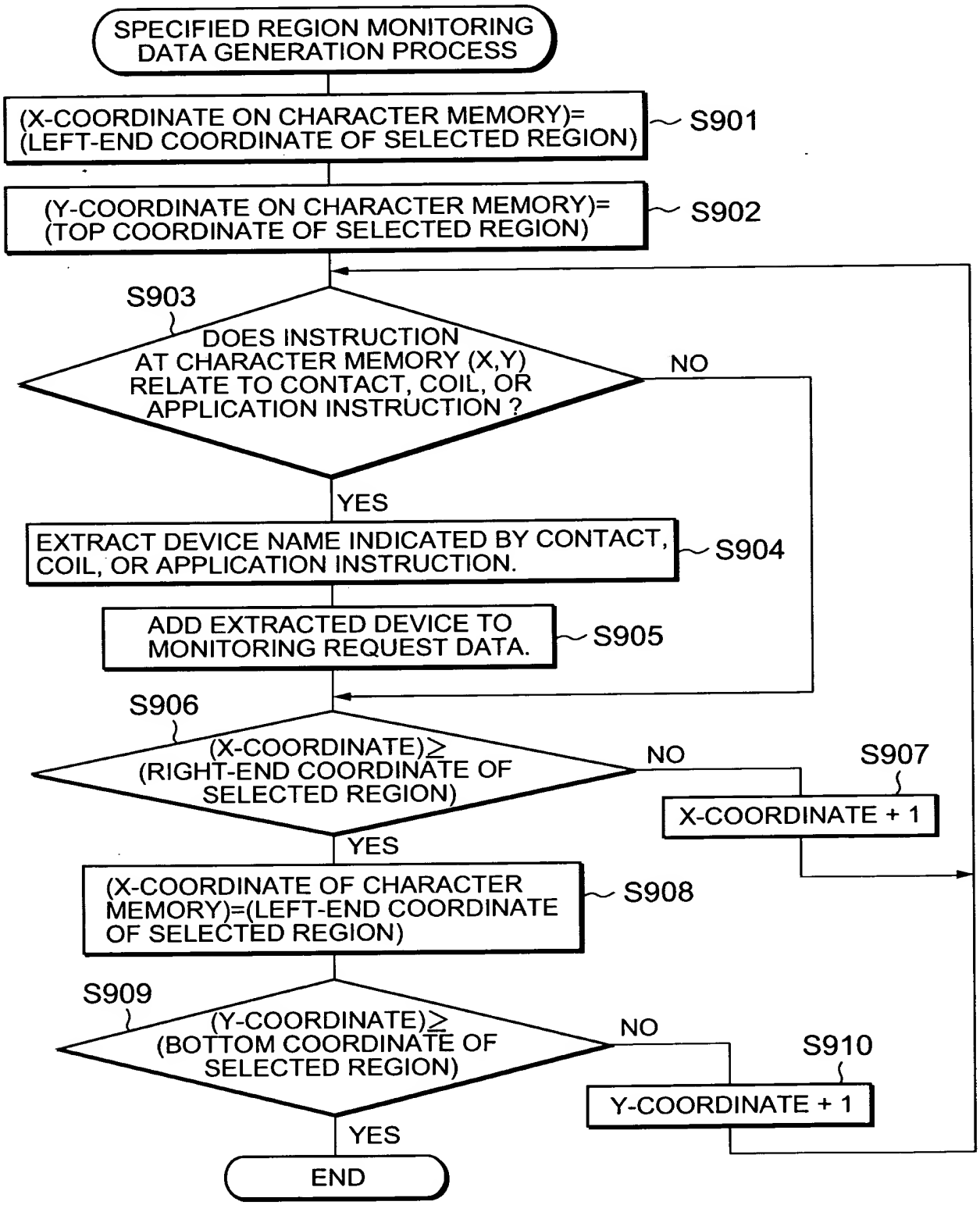

SPECIFIED REGION MONITORING DATA GENERATION PROCESS
(X-COORDINATE ON CHARACTER MEMORY)= (LEFT-END COORDINATE OF SELECTED REGION)
S901
(Y-COORDINATE ON CHARACTER MEMORY)= (TOP COORDINATE OF SELECTED REGION)
S902
S903
DOES INSTRUCTION AT CHARACTER MEMORY (X,Y) RELATE TO CONTACT, COIL, OR APPLICATION INSTRUCTION ?
NO
YES
EXTRACT DEVICE NAME INDICATED BY CONTACT, COIL, OR APPLICATION INSTRUCTION.
S904
ADD EXTRACTED DEVICE TO MONITORING REQUEST DATA.
S905
S906
(X-COORDINATE)≥ (RIGHT-END COORDINATE OF SELECTED REGION)
NO
S907
X-COORDINATE + 1
YES
(X-COORDINATE OF CHARACTER MEMORY)=(LEFT-END COORDINATE OF SELECTED REGION)
S908
S909
(Y-COORDINATE)≥ (BOTTOM COORDINATE OF SELECTED REGION)
NO
S910
Y-COORDINATE + 1
YES
END

FIG.34

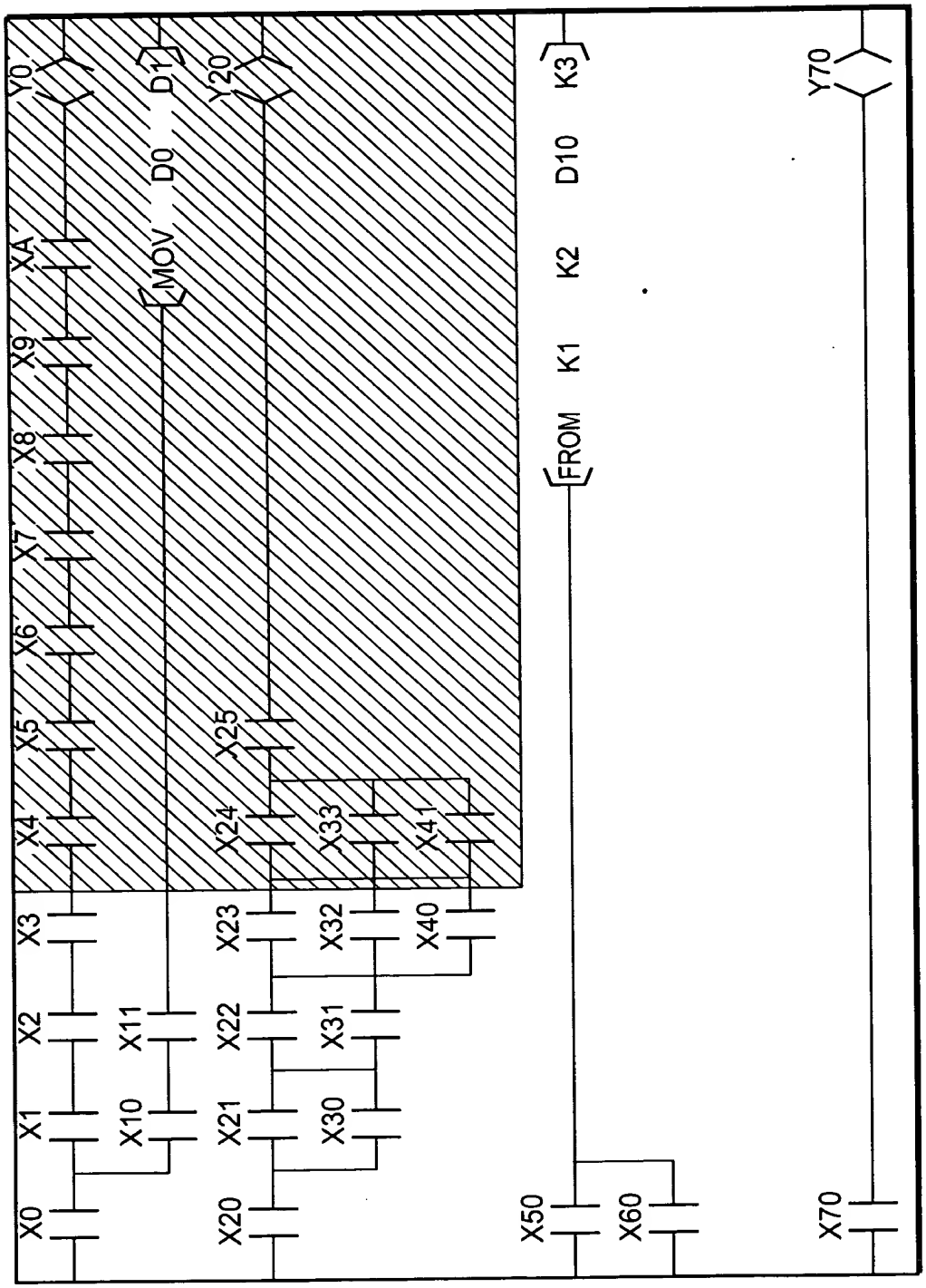

X0
X1
X2
X3
X4
X5
X6
X7
X8
X9
XA
Y0
MOV
D0
D1
X10
X11
X20
X21
X22
X23
X24
X25
Y20
X30
X31
X32
X33
X40
X41
FROM
K1
K2
D10
K3
X50
X60
Y70
X70

FIG.35

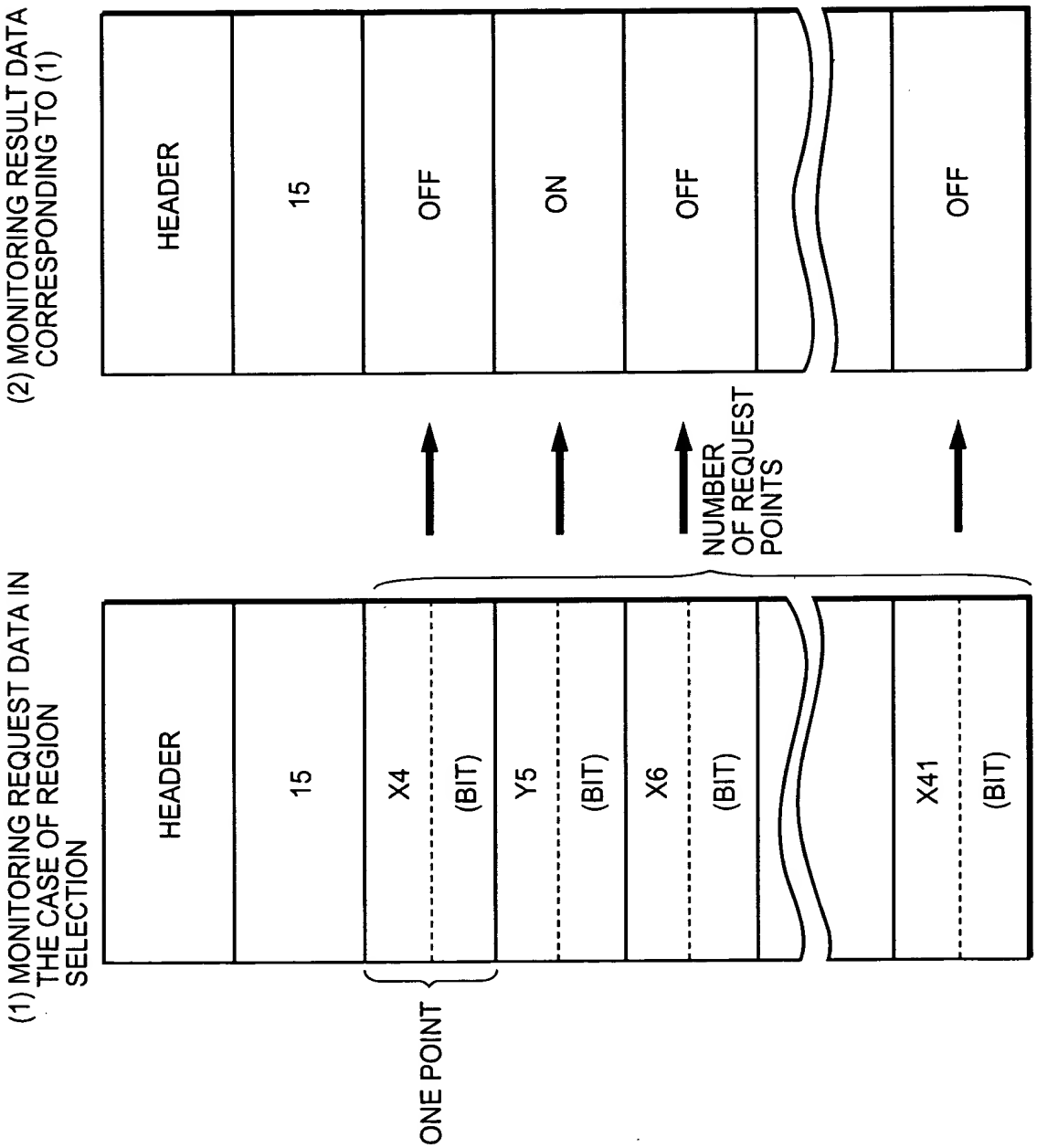

(2) MONITORING RESULT DATA CORRESPONDING TO (1)
HEADER
15
OFF
ON
OFF
OFF
NUMBER OF REQUEST POINTS
(1) MONITORING REQUEST DATA IN THE CASE OF REGION SELECTION
HEADER
15
X4
(BIT)
Y5
(BIT)
X6
(BIT)
X41
(BIT)
ONE POINT

FIG.36

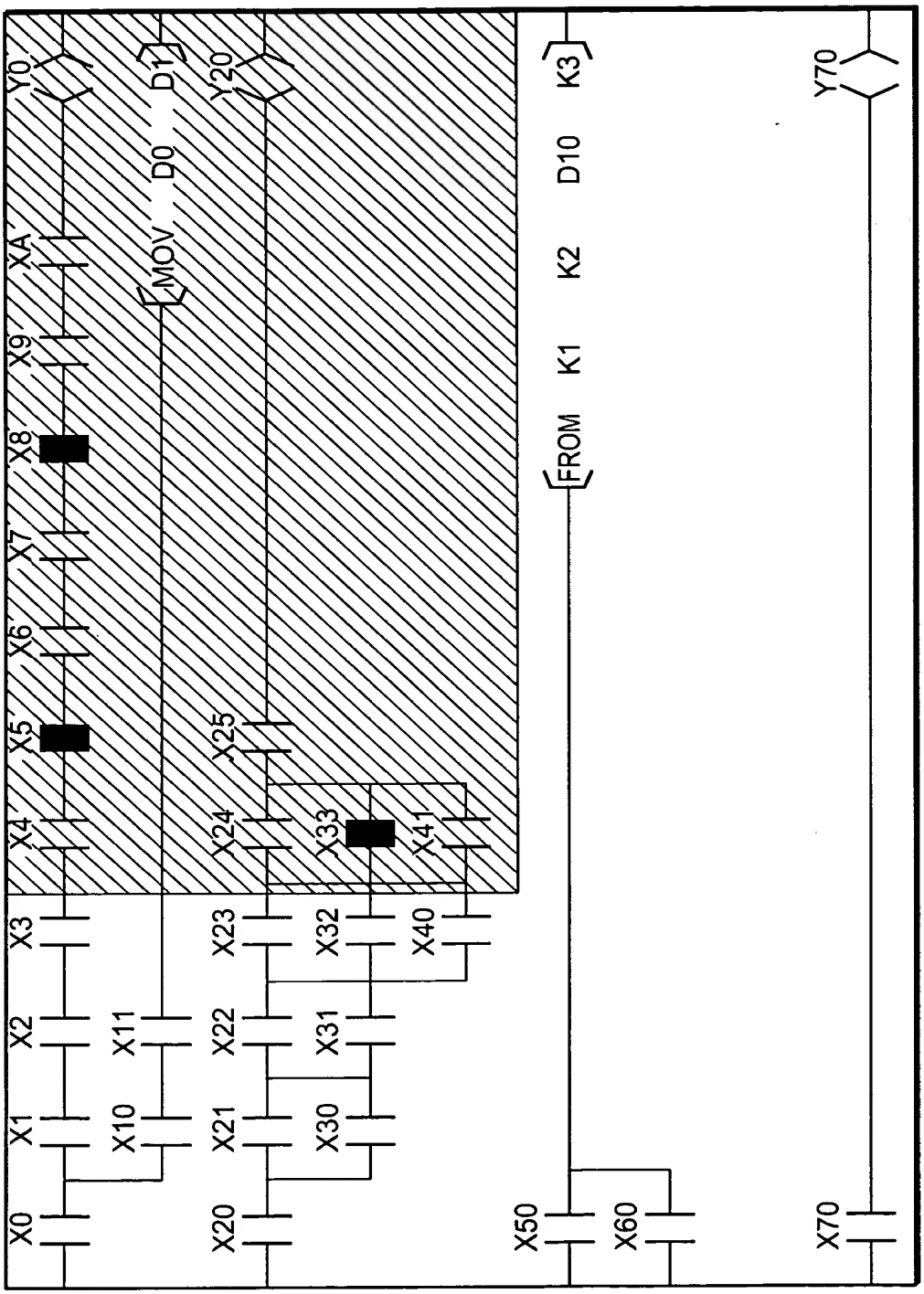

Y0
D1
Y20
Y70
K3
D10
K2
K1
FROM
MOV
D0
X0
X1
X2
X3
X4
X5
X6
X7
X8
X9
XA
X10
X11
X20
X21
X22
X23
X24
X25
X30
X31
X32
X33
X40
X41
X50
X60
X70

FIG.37

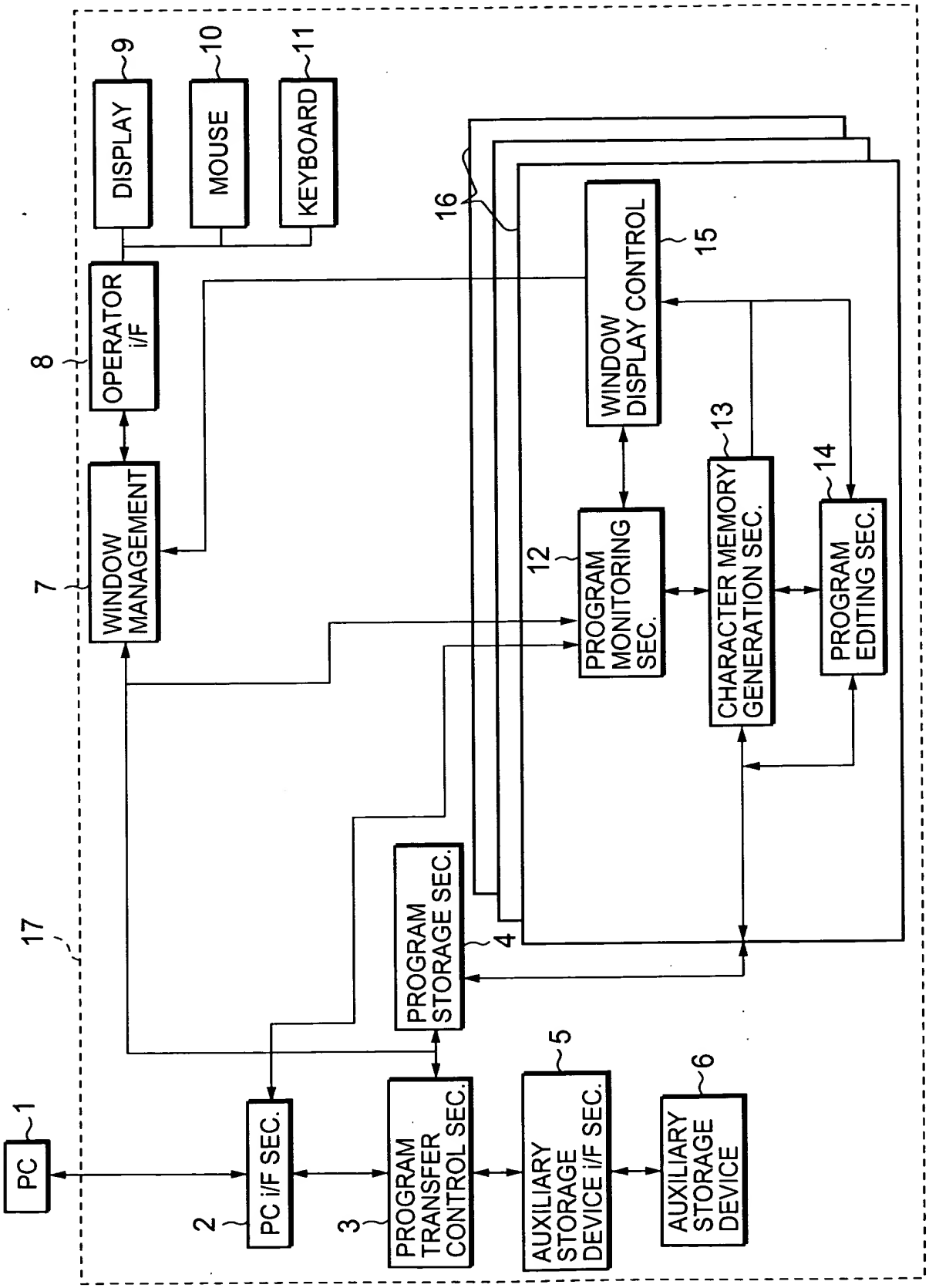

PC
1
PC i/F SEC.
2
PROGRAM TRANSFER CONTROL SEC.
3
AUXILIARY STORAGE DEVICE i/F SEC.
5
AUXILIARY STORAGE DEVICE
6
PROGRAM STORAGE SEC.
4
17
WINDOW MANAGEMENT
7
OPERATOR i/F
8
DISPLAY
9
MOUSE
10
KEYBOARD
11
16
WINDOW DISPLAY CONTROL
15
PROGRAM MONITORING SEC.
12
CHARACTER MEMORY GENERATION SEC.
13
PROGRAM EDITING SEC.
14

FIG.38

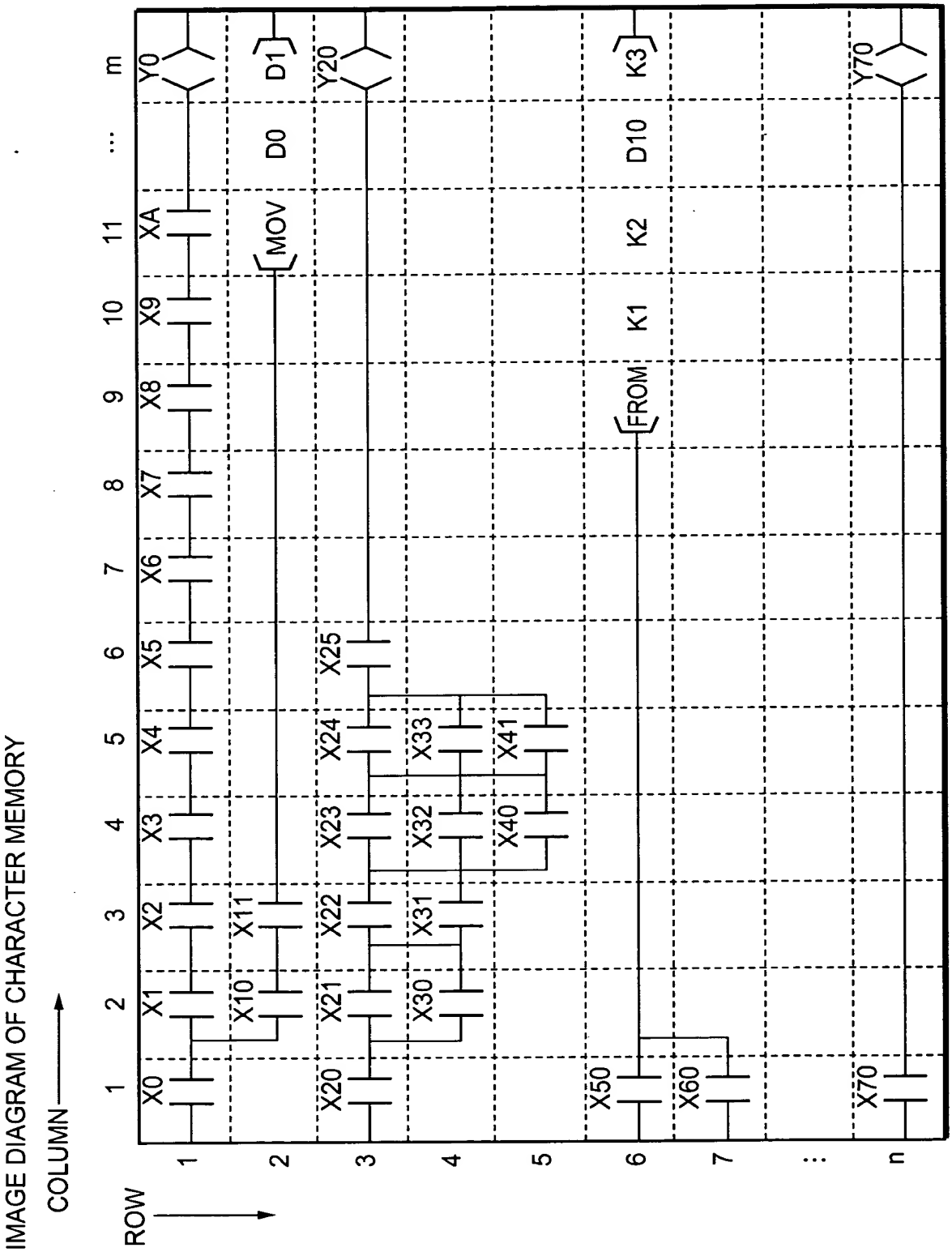


IMAGE DIAGRAM OF CHARACTER MEMORY
COLUMN
ROW
1
2
3
4
5
6
7
...
n
m
...
11
10
9
8
7
6
5
4
3
2
1
Y0
D1
Y20
K3
Y70
D0
D10
XA
MOV
K2
X9
K1
X8
FROM
X7
X6
X5
X25
X4
X24
X33
X41
X3
X23
X32
X40
X2
X11
X22
X31
X1
X10
X21
X30
X0
X20
X50
X60
X70

FIG.39

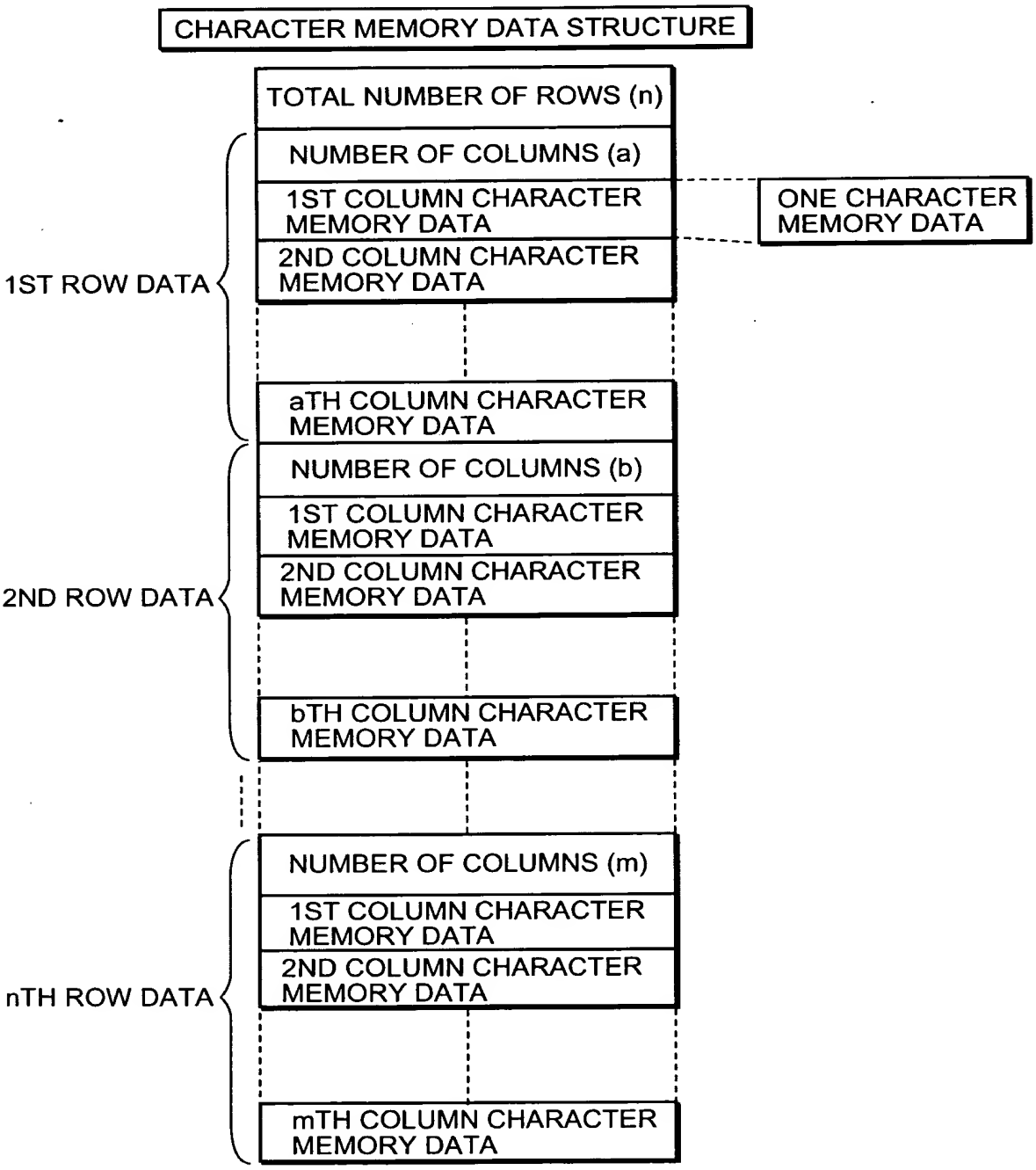

CHARACTER MEMORY DATA STRUCTURE
TOTAL NUMBER OF ROWS (n)
NUMBER OF COLUMNS (a)
1ST COLUMN CHARACTER MEMORY DATA
2ND COLUMN CHARACTER MEMORY DATA
ONE CHARACTER MEMORY DATA
1ST ROW DATA
aTH COLUMN CHARACTER MEMORY DATA
NUMBER OF COLUMNS (b)
1ST COLUMN CHARACTER MEMORY DATA
2ND COLUMN CHARACTER MEMORY DATA
2ND ROW DATA
bTH COLUMN CHARACTER MEMORY DATA
NUMBER OF COLUMNS (m)
1ST COLUMN CHARACTER MEMORY DATA
2ND COLUMN CHARACTER MEMORY DATA
nTH ROW DATA
mTH COLUMN CHARACTER MEMORY DATA

FIG.40

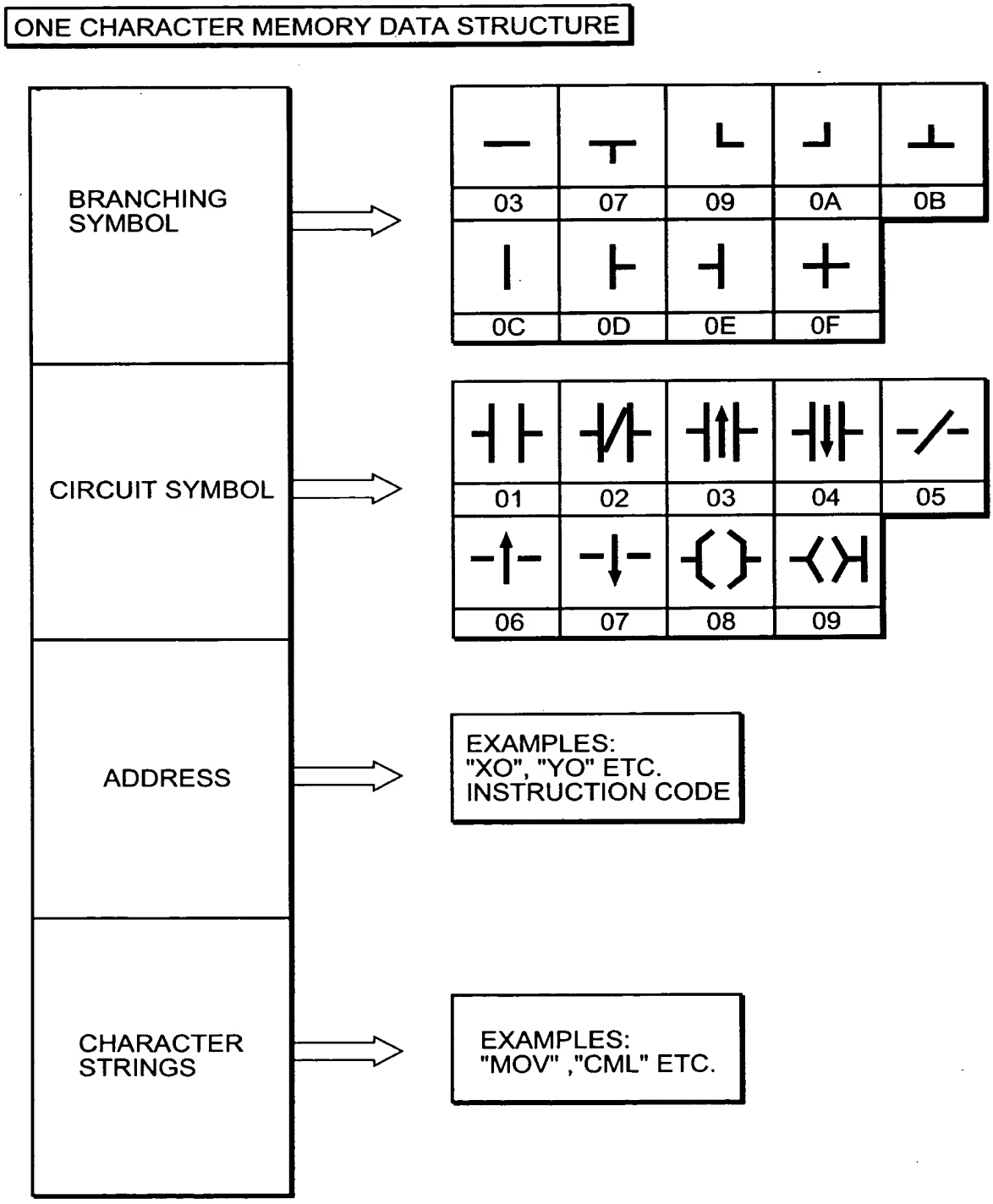

ONE CHARACTER MEMORY DATA STRUCTURE
BRANCHING SYMBOL
CIRCUIT SYMBOL
ADDRESS
CHARACTER STRINGS
03
07
09
0A
0B
0C
0D
0E
0F
01
02
03
04
05
06
07
08
09
EXAMPLES: "XO", "YO" ETC. INSTRUCTION CODE
EXAMPLES: "MOV" ,"CML" ETC.

FIG.41

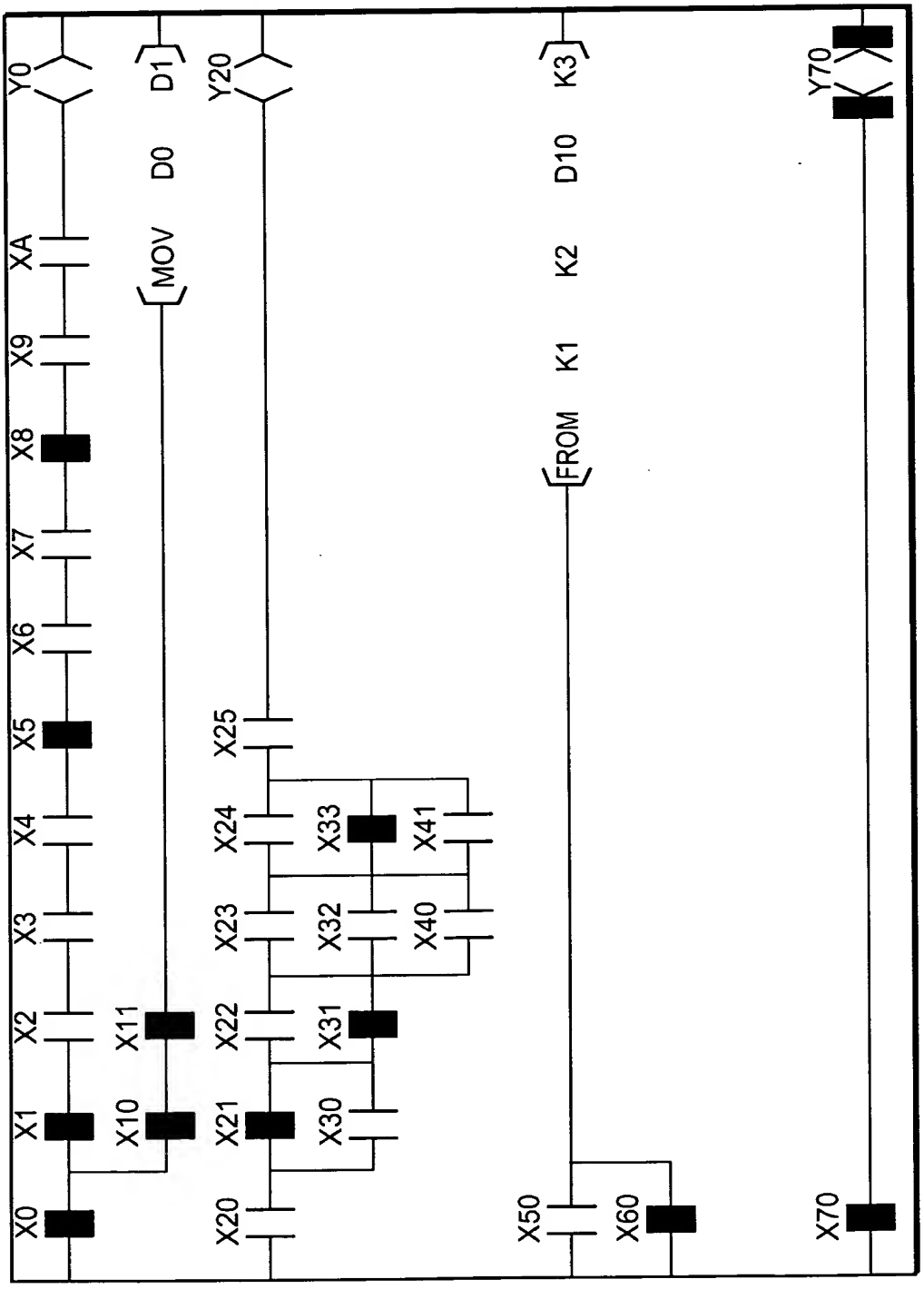

Y0
D1
Y20
K3
Y70
D0
D10
XA
MOV
K2
X9
K1
X8
FROM
X7
X6
X5
X25
X4
X24
X33
X41
X3
X23
X32
X40
X2
X11
X22
X31
X1
X10
X21
X30
X0
X20
X50
X60
X70

FIG.42

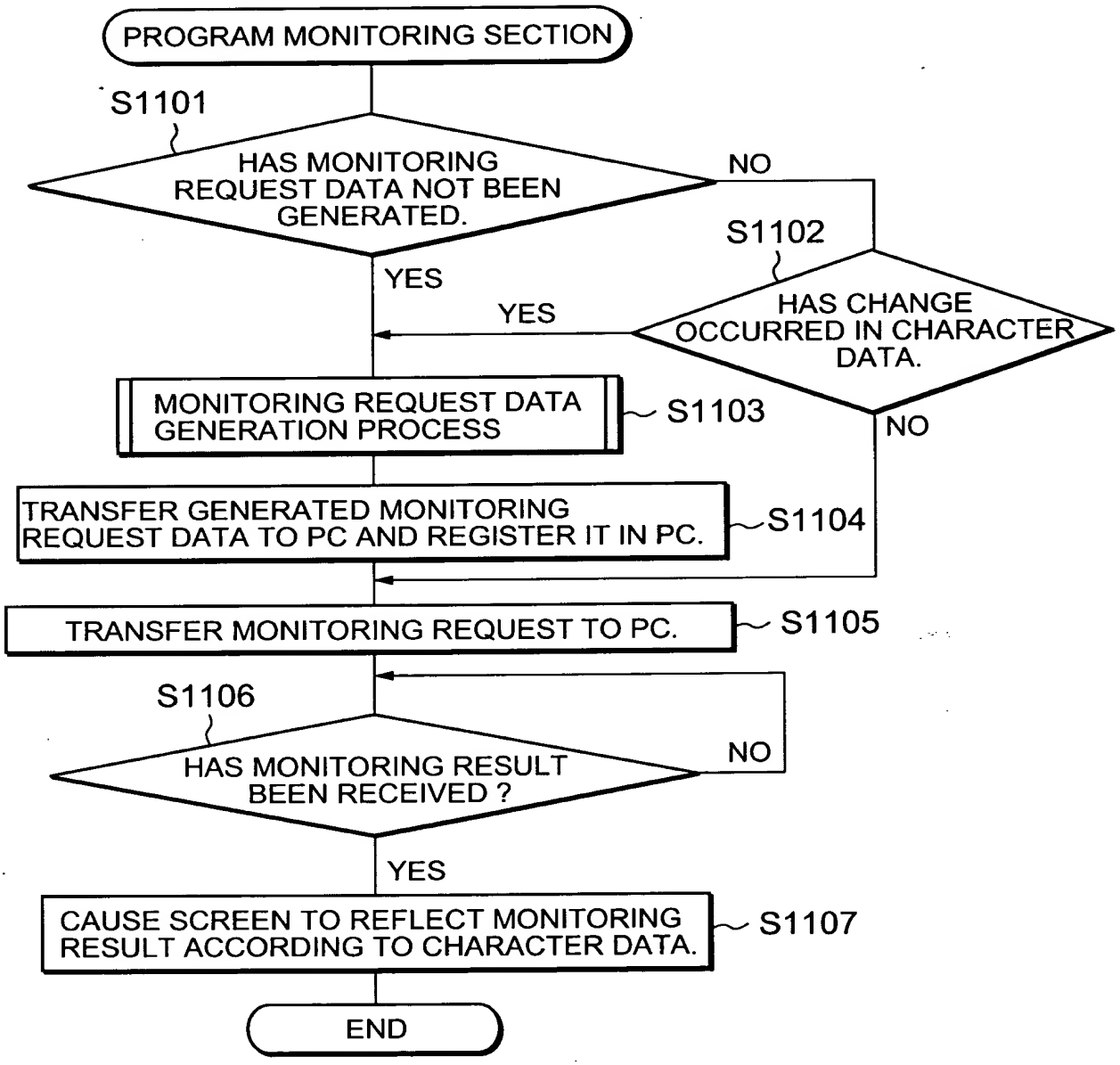

PROGRAM MONITORING SECTION
S1101
HAS MONITORING REQUEST DATA NOT BEEN GENERATED.
NO
YES
S1102
HAS CHANGE OCCURRED IN CHARACTER DATA.
YES
NO
MONITORING REQUEST DATA GENERATION PROCESS
S1103
TRANSFER GENERATED MONITORING REQUEST DATA TO PC AND REGISTER IT IN PC.
S1104
TRANSFER MONITORING REQUEST TO PC.
S1105
S1106
HAS MONITORING RESULT BEEN RECEIVED ?
NO
YES
CAUSE SCREEN TO REFLECT MONITORING RESULT ACCORDING TO CHARACTER DATA.
S1107
END

FIG.43

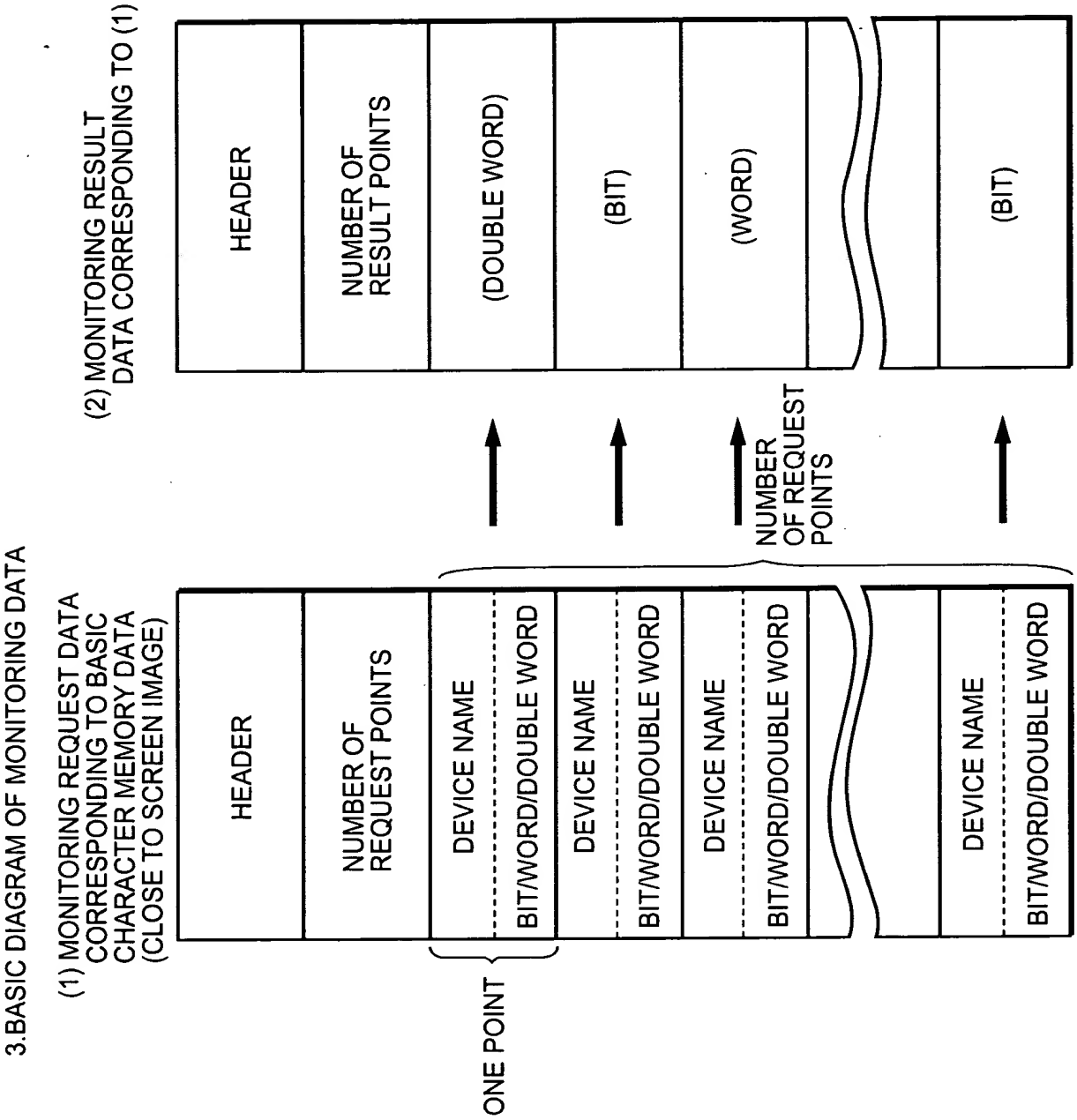

3.BASIC DIAGRAM OF MONITORING DATA
(1) MONITORING REQUEST DATA CORRESPONDING TO BASIC CHARACTER MEMORY DATA (CLOSE TO SCREEN IMAGE)
HEADER
NUMBER OF REQUEST POINTS
DEVICE NAME
BIT/WORD/DOUBLE WORD
DEVICE NAME
BIT/WORD/DOUBLE WORD
DEVICE NAME
BIT/WORD/DOUBLE WORD
DEVICE NAME
BIT/WORD/DOUBLE WORD
ONE POINT
NUMBER OF REQUEST POINTS
(2) MONITORING RESULT DATA CORRESPONDING TO (1)
HEADER
NUMBER OF RESULT POINTS
(DOUBLE WORD)
(BIT)
(WORD)
(BIT)

FIG.44

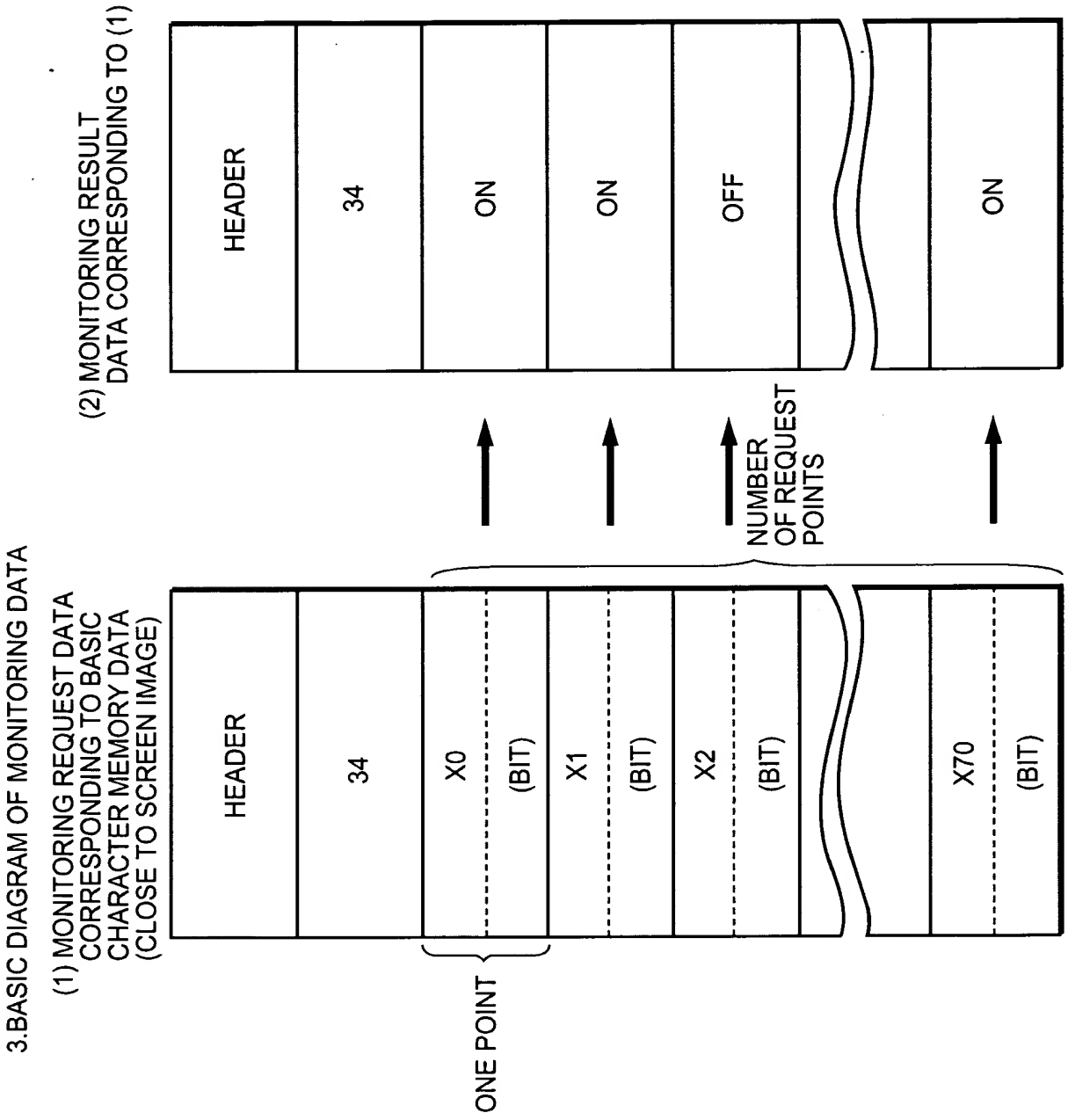
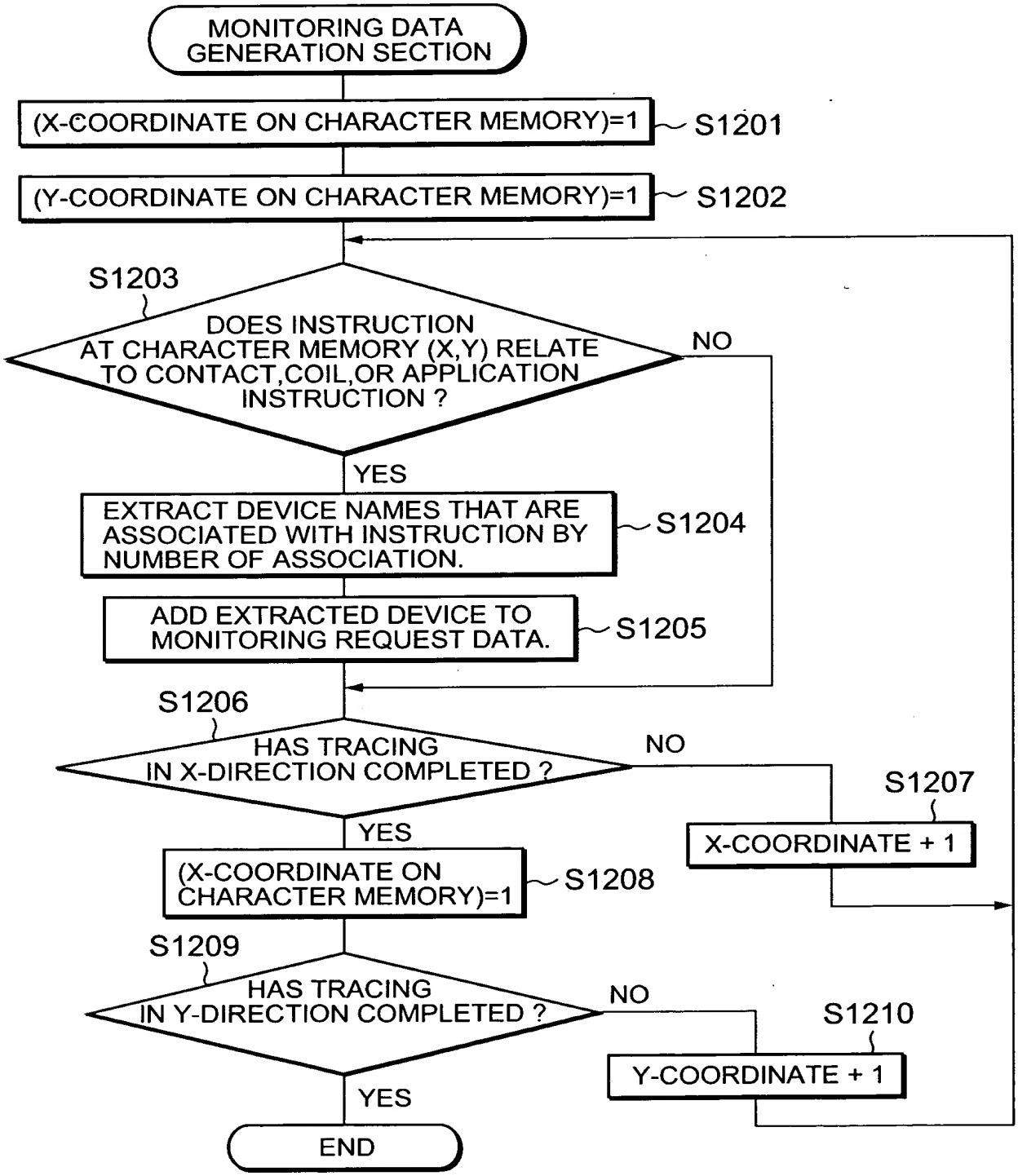

3.BASIC DIAGRAM OF MONITORING DATA
(1) MONITORING REQUEST DATA CORRESPONDING TO BASIC CHARACTER MEMORY DATA (CLOSE TO SCREEN IMAGE)
HEADER
34
X0
(BIT)
X1
(BIT)
X2
(BIT)
X70
(BIT)
ONE POINT
NUMBER OF REQUEST POINTS
(2) MONITORING RESULT DATA CORRESPONDING TO (1)
HEADER
34
ON
ON
OFF
ON

FIG.45


MONITORING DATA GENERATION SECTION
(X-COORDINATE ON CHARACTER MEMORY)=1
S1201
(Y-COORDINATE ON CHARACTER MEMORY)=1
S1202
S1203
DOES INSTRUCTION AT CHARACTER MEMORY (X,Y) RELATE TO CONTACT,COIL,OR APPLICATION INSTRUCTION ?
NO
YES
EXTRACT DEVICE NAMES THAT ARE ASSOCIATED WITH INSTRUCTION BY NUMBER OF ASSOCIATION.
S1204
ADD EXTRACTED DEVICE TO MONITORING REQUEST DATA.
S1205
S1206
HAS TRACING IN X-DIRECTION COMPLETED ?
NO
S1207
X-COORDINATE + 1
YES
(X-COORDINATE ON CHARACTER MEMORY)=1
S1208
S1209
HAS TRACING IN Y-DIRECTION COMPLETED ?
NO
S1210
Y-COORDINATE + 1
YES
END